



REPUBLIEK VAN SUID-AFRIKA

Departement van Gesondheid

VERSLAG

vir die Tydperk geëindig 31 Desember 1969
en 31 Desember 1970

Uitgegee op Gesag

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REPUBLIC OF SOUTH AFRICA

Department of Health

REPORT

for the Period ended 31 December 1969
and 31 December 1970

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DEPARTEMENT VAN GESONDHEID
DEPARTMENT OF HEALTH

*Met die Komplimente van die
Sekretaris van Gesondheid*

*With the Compliments of the
Secretary for Health*

G.P.-S.



REPUBLIEK VAN SUID-AFRIKA

VERSLAG

vir die Tydperk geëindig 31 Desember 1969

en 31 Desember 1970

Departement van Gesondheid



REPUBLIC OF SOUTH AFRICA

REPORT

for the Period ended 31 December 1969

and 31 December 1970

Department of Health

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Jaarverslag vir die Tydperk geëindig 31 Desember 1969 en 31 Desember 1970

Annual Report for the Period ended 31 December 1969 and 31 December 1970

SY EDELE DIE MINISTER VAN GESONDHEID:

Ek het die eer om vir u inligting die volgende verslag oor die werksaamhede van die Departement van Gesondheid vir die jare geëindig 31 Desember 1969 en 31 Desember 1970 in te dien.

THE HONOURABLE THE MINISTER OF HEALTH:

I have the honour to submit, for your information, the following report on the work of the Department of Health for the years ended 31 December 1969 and 31 December 1970.

I. INLEIDING

DEPARTEMENT VAN GESONDHEID VIR DIE
JAAR GEËINDIG 31 DESEMBER 1969

Minister van Gesondheid:

Sy Edele dr. Carel de Wet

Senior Beampes van die Departement:

Sekretaris van Gesondheid en Hoofgesondheids-
beampte:

Dr. C. A. M. Murray, 1 Januarie—30 Junie 1969
Genl.-maj. E. C. Raymond, S.S.A., S.M., 1 Julie—
31 Desember 1969

Direkteur van Geneeskundige Dienste:

Brig. J. Gilliland, S.M., 1 September—31 Desember
1969

Direkteur van Geneeskundige Beplanning:

Dr. J. P. Roux, 1 September—31 Desember 1969

Direkteur van Bedryfsgeneeskunde:

Dr. E. R. Steyn, 1 September—31 Desember 1969

Direkteur van Gesondheidsvoorligting:

Prof. C. A. Erasmus, 10 November—31 Desember
1969

Direkteur van Gesondheidslaboratoriumdienste:

Prof. L. S. Smith, 1 September—31 Desember 1969

Kommissaris van Geestesgesondheid:

Dr. A. M. Lamont

Adjunk-kommissaris van Geestesgesondheid:

Dr. A. J. van Wyk

Senior Spesialis-geneesheer:

Dr. H. G. H. Houghton

Hoof: Staatspatologiese Dienste:

Prof. L. S. Smith, 1 Januarie—31 Augustus 1969

Adviseur, insake Teringdienste:

Dr. B. A. Dormer

I. INTRODUCTION

DEPARTMENT OF HEALTH FOR THE YEAR
ENDED 31 DECEMBER 1969

Minister of Health:

Dr the Honourable Carel de Wet

Senior Officers of the Department:

Secretary for Health and Chief Health Officer:

Dr C. A. M. Murray, 1 January—30 June 1969
Maj.-Gen. E. C. Raymond, S.S.A., S.M., 1 July—
31 December 1969

Director of Medical Services:

Brig. J. Gilliland, S.M., 1 September—31 December
1969

Director of Medical Planning:

Dr J. P. Roux, 1 September—31 December 1969

Director of Industrial Health:

Dr E. R. Steyn, 1 September—31 December 1969

Director of Health Education:

Prof. C. A. Erasmus, 10 November—31 December
1969

Director of Health Laboratory Services:

Prof. L. S. Smith, 1 September—31 December 1969

Commissioner for Mental Health:

Dr A. M. Lamont

Deputy Commissioner for Mental Health:

Dr A. J. van Wyk

Senior Specialist Physician:

Dr H. G. H. Houghton

Chief: Government Pathological Services:

Prof. L. S. Smith, 1 January—31 August 1969

Adviser on Tuberculosis Services:

Dr B. A. Dormer

Assistent-hoofstaatsgesondheidsbeamptes :

Dr. W. A. Smit
 Dr. E. R. Steyn, 1 Januarie—31 Augustus 1969
 Dr. B. J. van Rensburg
 Dr. J. N. du Plessis, 1 Desember—31 Desember 1969
 Kol. L. J. Kriel, 1 Desember—31 Desember 1969

Streekdirekteure :

Dr. H. H. Eiselen, Johannesburg
 Dr. G. H. Joubert, Oos-Londen
 Dr. D. H. Hooey, Durban
 Dr. L. Been, Kaapstad
 Dr. J. F. Goedhals, Bloemfontein
 Dr. N. J. le Roux, Pietersburg.

| | |
|--|---|
| Adjunk-sekretarisse..... | 2 |
| Ondersekretarisse..... | 4 |
| Registrateur van Medisyne..... | 1 |
| Hoofrekenmeester..... | 1 |
| Hoofdistriksgeneeshere..... | 2 |
| Senior Mediese Superintendent..... | 1 |
| Adviseur insake Hospitaalbeplanning..... | 1 |
| Senior Staatspatoloog..... | 1 |
| Senior Psigiaters..... | 6 |

Assistant Chief State Health Officers :

Dr W. A. Smit
 Dr E. R. Steyn, 1 January—31 August 1969
 Dr B. J. van Rensburg
 Dr J. N. du Plessis, 1 December—31 December 1969
 Col. L. J. Kriel, 1 December—31 December 1969

Regional Directors :

Dr H. H. Eiselen, Johannesburg
 Dr G. H. Joubert, East London
 Dr D. H. Hooey, Durban
 Dr L. Been, Cape Town
 Dr J. F. Goedhals, Bloemfontein
 Dr N. J. le Roux, Pietersburg

| | |
|------------------------------------|---|
| Deputy Secretaries..... | 2 |
| Under-Secretaries..... | 4 |
| Registrar of Drugs..... | 1 |
| Chief Accountant..... | 1 |
| Chief District Surgeons..... | 2 |
| Senior Medical Superintendent..... | 1 |
| Adviser on Hospital Planning..... | 1 |
| Senior Government Pathologist..... | 1 |
| Senior Psychiatrists..... | 6 |

GOEDGEKEURDE DIENSSTAAT:

31 DESEMBER 1969 (i) EN 31 DESEMBER 1970 (ii)

VOLTYDSE POSTE

| | (i) | (ii) |
|--|-------|-------|
| Vakkundig— | | |
| Mediese Beamptes: | | |
| Hoofkantoor..... | 20 | 21 |
| Streekkantore..... | 67 | 81 |
| Tuberkulosedienste..... | 50 | 50 |
| Laboratoriumdienste..... | 9 | 16 |
| Geestesgesondheidsdienste..... | 68 | 76 |
| Distriksgeneeshere..... | 110 | 123 |
| Lepradienste..... | 5 | 5 |
| Algemene Hospitale..... | — | 113 |
| Mediese Beamptes (Nie-Blank)..... | — | 3 |
| Ander Vakkundige Beamptes— | | |
| Hoof: Afdeling Gesondheidskeikunde... | 1 | 1 |
| Assistent-hoof: Afdeling Gesondheidskeikunde..... | 1 | 1 |
| Hoofvoedingsadviseur..... | 1 | 1 |
| Tandartse..... | 7 | 10 |
| Farmakoloog..... | 1 | 1 |
| Hoofbeampte vir die Bestryding van Lugbesoedeling..... | 1 | 1 |
| Hoofinspekteur: Bestryding van Lugbesoedeling..... | 2 | 2 |
| Staatsekoloog..... | 1 | 1 |
| Aptekers..... | 15 | 29 |
| Vakkundige Beamptes..... | 31 | 35 |
| Kliniese Sielkundiges..... | 5 | 8 |
| Administratief— | | |
| Administratief..... | 111 | 116 |
| Tegnies— | | |
| Staatsgesondheidsinspekteurs..... | 64 | 64 |
| Arbeidsterapeute..... | 43 | 44 |
| Fisioterapeute..... | 7 | 8 |
| Radiografiste..... | 8 | 14 |
| Geneeskundige Tegnoloë..... | 80 | 99 |
| Tegnikusse..... | 2 | 2 |
| Bantoe Staatsgesondheidsinspekteurs | 18 | 22 |
| Klerklik..... | 165 | 285 |
| Algemeen— | | |
| Verpleegpersoneel: Blank/Nie-Blank | 4 045 | 6 962 |

AUTHORISED ESTABLISHMENT:

31 DECEMBER 1969 (i) AND 31 DECEMBER 1970 (ii)

FULL-TIME POSTS

| | (i) | (ii) |
|--|-------|-------|
| Professional— | | |
| Medical Officers: | | |
| Head Office..... | 20 | 21 |
| Regional Offices..... | 67 | 81 |
| Tuberculosis Services..... | 50 | 50 |
| Laboratory Services..... | 9 | 16 |
| Mental Health Services..... | 68 | 76 |
| District Surgeons..... | 110 | 123 |
| Leprosy Services..... | 5 | 5 |
| General Hospitals..... | — | 113 |
| Medical Officers (Non-White)..... | — | 3 |
| Other Professional Officers— | | |
| Chief: Division of Health Chemistry... | 1 | 1 |
| Assistant Chief: Division of Health Chemistry..... | 1 | 1 |
| Chief Nutrition Adviser..... | 1 | 1 |
| Dentists..... | 7 | 10 |
| Pharmacologist..... | 1 | 1 |
| Chief Air Pollution Control Officer.... | 1 | 1 |
| Chief Inspector: Air pollution Control. | 2 | 2 |
| State Ecologist..... | 1 | 1 |
| Pharmacists..... | 15 | 29 |
| Professional Officers..... | 31 | 35 |
| Clinical Psychologists..... | 5 | 8 |
| Administrative— | | |
| Administrative..... | 111 | 116 |
| Technical— | | |
| Government Health Inspectors..... | 64 | 64 |
| Occupational Therapists..... | 43 | 44 |
| Physiotherapists..... | 7 | 8 |
| Radiographers..... | 8 | 14 |
| Medical Technologists..... | 80 | 99 |
| Technicians..... | 2 | 2 |
| Bantu State Health Inspectors..... | 18 | 22 |
| Clerical..... | 165 | 285 |
| General— | | |
| Nursing Staff: White/Non-White..... | 4 045 | 6 962 |

| | | |
|-----------------------------------|-------|-------|
| Ander— | | |
| Ambagsmanne..... | 213 | 199 |
| Tegniese Assistentes..... | 179 | 207 |
| Voorradebeamptes..... | 103 | 110 |
| Huishoudelike Personeel, ens..... | 505 | 557 |
| Nie-Blankes..... | 5 515 | 6 958 |

DEELTYDSE POSTE

Vakkundig—

Mediese Beamptes:

| | | |
|--------------------------------|-----|-----|
| Hoofkantoor..... | — | — |
| Streekkantore..... | 3 | 4 |
| Tuberkulosedienste..... | 1 | 4 |
| Laboratoriumdienste..... | 3 | 5 |
| Geestesgesondheidsdienste..... | 4 | 4 |
| Lepradienste..... | 2 | 2 |
| Distriksgeneeshere..... | 404 | 404 |
| Algemeen..... | — | 25 |

DEPARTEMENT VAN GESONDHEID SOOS OP
31 DESEMBER 1970

Minister van Gesondheid:

Sy Edele dr. Carel de Wet

Senior Beamptes van die Departement:

Sekretaris van Gesondheid en Hoofgesondheids-
beampte:

Genl.-maj. E. C. Raymond, S.S.A., S.M.

Direkteur van Geneeskundige Dienste:

Brig. J. Gilliland, S.M.

Direkteur van Geneeskundige Beplanning:

Dr. J. P. Roux

Direkteur van Bedryfsgeneeskunde:

Dr. E. R. Steyn

Direkteur van Gesondheidsvoorligting:

Prof. C. A. Erasmus

Direkteur van Gesondheidslaboratoriumdienste:

Prof. L. S. Smith

Direktrise van Verpleegdienste:

Mej. M. C. van Huyssteen

Assistent-direkteure van Geneeskundige Beplanning:

Dr. J. N. du Plessis

Dr. J. P. H. Rossouw

Assistent-direkteure van Geneeskundige Dienste:

Kol. L. J. Kriel

Dr. W. A. Smit

Assistent-direkteure van Bedryfsgeneeskunde:

Dr. G. I. van Rooyen

Dr. P. N. Swanepoel

Hoof, Staatspatologiese Dienste:

Prof. T. G. Schwär

Hoof, Afdeling Gesondheidskeikunde:

Mnr. J. W. de Graad

Adjunk-sekretarisse:

Mnr. G. R. Kempff

Mnr. I. J. Marais

Mnr. C. R. W. Marx

Other—

| | | |
|---------------------------|-------|-------|
| Artisans..... | 213 | 199 |
| Technical Assistants..... | 179 | 207 |
| Stores Officers..... | 103 | 110 |
| Domestic Staff, etc..... | 505 | 557 |
| Non-Whites..... | 5 515 | 6 958 |

PART-TIME POSTS

Professional—

Medical Officers:

| | | |
|-----------------------------|-----|-----|
| Head Office..... | — | — |
| Regional Offices..... | 3 | 4 |
| Tuberculosis Services..... | 1 | 4 |
| Laboratory Services..... | 3 | 5 |
| Mental Health Services..... | | 4 |
| Leprosy Services..... | 2 | 2 |
| District Surgeons..... | 404 | 404 |
| General..... | — | 25 |

DEPARTMENT OF HEALTH AS AT
31 DECEMBER 1970

Minister of Health:

Dr the Hon. Carel de Wet

Senior Officers of the Department:

Secretary for Health and Chief Health Officer:

Maj.-Gen. E. C. Raymond, S.S.A., S.M.

Director of Medical Services:

Brig. J. Gilliland, S.M.

Director of Medical Planning:

Dr J. P. Roux

Director of Industrial Medicine:

Dr E. R. Steyn

Director of Health Education:

Prof. C. A. Erasmus

Director of Health Laboratory Services:

Prof. L. S. Smith

Directress of Nursing Services:

Miss M. C. van Huyssteen

Assistant Directors of Medical Planning:

Dr J. N. du Plessis

Dr J. P. H. Rossouw

Assistant Directors of Medical Services:

Col. L. J. Kriel

Dr W. A. Smit

Assistant Directors of Industrial Medicine:

Dr G. I. van Rooyen

Dr P. N. Swanepoel

Chief: Government Pathology Services:

Prof. T. G. Schwär

Chief: Division Health Chemistry:

Mr J. W. de Graad

Deputy Secretaries:

Mr G. R. Kempff

Mr I. J. Marais

Mr C. R. W. Marx

Ondersekretarisse:

Mnr. A. D. Barnard
 Mnr. D. A. Horak
 Mnr. D. J. van Schalkwyk
 Mnr. C. J. Cilliers
 Mnr. J. H. van den Berg
 Mnr. N. G. J. Oosthuizen
 Mnr. M. H. Raath

Hoofrekenmeesters:

Mnr. P. J. P. Lombard
 Mnr. T. B. Odendaal

Adjunk-kommissaris van Geestesgesondheid:

Dr. A. J. van Wyk

Registrateur van Medisyne:

Mnr. N. van der Merwe

Voedingkundige (Volksgeondheid):

Vakant

Epidemioloog:

Dr. L. W. Osburn

Hoofstaats- Mediese Beamptes:

Dr. S. de Jong
 Dr. T. F. B. Collins
 Dr W. Wittman
 Dr O. I. B. Kreher
 Dr J. J. W. W. Bodenstein
 Dr. W. P. Steyn
 Dr. G. Oberholster

Streekdirekteure: Staatsgesondheidsdienste:

Kaapstad: Dr. N. J. le Roux
 Port Elizabeth: Dr. J. D. Krynauw
 Durban: Dr. G. A. Joubert
 Bloemfontein: Dr. J. W. van der Riet
 Johannesburg: Dr J. F. Goedhals
 Pietersburg: Dr. D. H. Hooey
 Umtata: Dr. M. G. van Schalkwyk

Assistent-streekdirekteure: Staatsgesondheids-

| | |
|--------------------------------------|----|
| dienste..... | 7 |
| Hoofdistriksgeneeshere..... | 3 |
| Eerste Distriksgeneeshere..... | 20 |
| Eerste Staats- Mediese Beamptes..... | 13 |
| Hoof: Staatspatologiese Dienste..... | 1 |
| Senior Staatspatoloë..... | 4 |

Sielsieke-hospitale en inrigtings vir Swaksinniges

| | |
|----------------------------|----|
| (a) Senior Psigiaters..... | 7 |
| (b) Psigiaters..... | 18 |

T.B.-hospitale en inrigtings vir pasiente wat aan lepra ly

| | |
|--|---|
| (a) Senior Mediese Superintendent..... | 1 |
| (b) Mediese Superintendente..... | 7 |
| (c) Senior Spesialis-geneesheer..... | 1 |
| (d) Spesialis-geneesheer..... | 1 |
| (e) Eerste Staats- Mediese Beamptes..... | 2 |

Algemene hospitale

| | |
|--|---|
| (a) Senior Mediese Superintendent..... | 1 |
| (b) Mediese Superintendente..... | 5 |
| (c) Eerste Spesialiste..... | 8 |
| (d) Senior Spesialiste..... | 5 |
| (e) Eerste Staats- Mediese Beamptes..... | 4 |

Under-Secretaries:

Mr A. D. Barnard
 Mr D. A. Horak
 Mr D. J. van Schalkwyk
 Mr C. J. Cilliers
 Mr J. H. van den Berg
 Mr N. G. J. Oosthuizen
 Mr M. H. Raath

Chief Accountants:

Mr P. J. P. Lombard
 Mr T. B. Odendaal

Deputy Commissioner for Mental Health:

Dr A. J. van Wyk

Registrar of Drugs:

Mr N. van der Merwe

Nutritionist (Public Health):

Vacant

Epidemiologist:

Dr L. W. Osburn

Chief Government Medical Officers:

Dr S. de Jong
 Dr T. F. B. Collins
 Dr W. Wittmann
 Dr O. I. B. Kreher
 Dr J. J. W. W. Bodenstein
 Dr W. P. Steyn
 Dr G. Oberholster

Regional Directors: State Health Services:

Cape Town: Dr N. J. le Roux
 Port Elizabeth: Dr J. D. Krynauw
 Durban: Dr G. A. Joubert
 Bloemfontein: Dr J. W. van der Riet
 Johannesburg: Dr J. F. Goedhals
 Pietersburg: Dr D. H. Hooey
 Umtata: Dr M. G. van Schalkwyk

Assistant Regional Directors: State Health

| | |
|--|----|
| Services..... | 7 |
| Chief District Surgeons..... | 3 |
| Principal District Surgeons..... | 20 |
| Principal Government Medical Officers..... | 13 |
| Chief: Government Pathology Services..... | 1 |
| Senior Government Pathologists..... | 4 |

Mental Hospitals and Institutions for the Feeble-minded

| | |
|-------------------------------|----|
| (a) Senior Psychiatrists..... | 7 |
| (b) Psychiatrists..... | 18 |

T.B. Hospitals and Leprosy Institutions

| | |
|---|---|
| (a) Senior Medical Superintendent..... | 1 |
| (b) Medical Superintendents..... | 7 |
| (c) Senior Specialist Physician..... | 1 |
| (d) Specialist Physician..... | 1 |
| (e) Principal Government Medical Officers.... | 2 |

General Hospitals

| | |
|---|---|
| (a) Senior Medical Superintendent..... | 1 |
| (b) Medical Superintendents..... | 5 |
| (c) Principal Specialists..... | 8 |
| (d) Senior Specialists..... | 5 |
| (e) Principal Government Medical Officers.... | 4 |

II. TAK BEDRYFSGENEESKUNDE

1. VERSLAG TEN OPSIGTE VAN DIE TYDPERK 1 JANUARIE 1969 TOT 31 DESEMBER 1970

1.1 'n Glanspunt van hierdie tydperk was die totstandkoming van die Tak Bedryfsgeneeskunde met die volgende doelstelling:

Om die mens te beskerm teen omgewingsfaktore wat skadelik en hinderlik is en sy gesondheid nadelig kan beïnvloed en om die gesondheidsveiligheid van middels te verseker wat vir menslike verbruik beskikbaar gestel word.

1.2 Die Tak wat bestuur word deur die Direkteur, dr. E. R. Steyn, en die twee Assistent-direkteure, dr. P. N. Swanepoel en dr. G. I. van Rooyen, bestaan uit die volgende Afdelings:

- Gifstowwebeheer.
- Stralingsbeheer.
- Nywerheidsgesondheid.
- Waterbesoedelingsbeheer.
- Lugbesoedelingsbeheer.
- Registrasie van Medisyne.
- Wetstoepassing.

1.3 Eersgenoemde vier Afdelings is pas geskep, terwyl laasgenoemde drie reeds voor 1 Januarie 1969 gefunksioneer het maar uit die aard van hulle werksaamhede by die Tak ingeskakel is.

2. GIFSTOWWEBEHEER

2.1 Weens die gesondheidsgevaare wat die onbeperkte beskikbaarheid en ongekontroleerde toediening van plaagbeheer- en insektemiddels vir beide gifstofhanteerders en -verbruikers inhou, het doeltreffende regulering 'n dringende noodsaaklikheid geword. Om hierdie doelstelling te bereik, is 'n Staande Interdepartementele Advieskomitee by die Departement van Landbou-tegniese Dienste in die lewe geroep, waarin die Departement van Gesondheid 'n leidende rol vervul. Die werksaamhede van hierdie komitee behels die oorweging van die toksisiteit van aktiewe bestanddele in plaagbeheer- en insektemiddels, giftigheid van afbraakprodukte, standhoudendheid, residu op landbouprodukte, veiligheidsperiodes tussen toediening en bemarking, toelaatbare veilige toleransies op bemarkte landbouprodukte en geprosesseerde voedsel. So is die vrye gebruik van o.a. DDT en ander standhoudende organochloor-insektmiddels reeds drasties ingeperk en word aandag aan ander gevaarlike middels gegee. Die keuring van die toenemende aantal nuwe middels wat daagliks beskikbaar gestel word, is 'n taak wat steeds hoër eise sal stel.

2.2 Weens die onrusbarende aantal gevalle van allerlei soorte vergiftiging wat daagliks in die land voorkom en die lewensgevaare wat enige vertraging van effektiewe nood- en opvolgingsbehandeling inhou, het die onmiddellike beskikbaarheid van volledige en betroubare inligting asook van doeltreffende behandelingsfasiliteite 'n dringende noodsaaklikheid geword.

2.3 Die insameling en verwerking van inligting oor die toksikologiese eienskappe van chemikalieë, toksisiteitsbepalings, tekens en simptome van vergiftiging, aangewese laboratoriumtoetse vir diagnostiese doeleindes, toetsmetodes vir die identifisering van gifstowwe, doeltreffende teenmiddels en ander behandelingsmetodes is 'n taak wat deur hierdie Departement aanvaar is. 'n Massa data is reeds ingesamel.

2.4 Die Afdeling Gifstowwebeheer sal dien as sentrale buro vir die opstel van volledige data en die verskaffing daarvan aan alle vergifsentrums wat strategies dwarsdeur die Republiek versprei sal wees.

II INDUSTRIAL HEALTH BRANCH

1. REPORT FOR THE PERIOD 1 JANUARY 1969 TO 31 DECEMBER 1970

1.1 A highlight of this period was the establishment of the Industrial Health Branch with the following aims:

To protect man against environmental factors which are harmful and inconvenient and which may be injurious to his health and to ensure the health safety of substances which are made available for human consumption.

1.2 The Branch, which is run by the Director, Dr E. R. Steyn and the two Assistant Directors, Dr P. N. Swanepoel and Dr G. I. van Rooyen, consists of the following divisions:

- Poison Control.
- Control of Irradiation.
- Occupational Health.
- Water Pollution Control.
- Atmospheric Pollution Control.
- Registration of Drugs.
- Law Administration.

1.3 The first four are newly established divisions, whereas the last three were already functioning before 1 January 1969 but have been integrated with the Branch because of the nature of their activities.

2. POISON CONTROL

2.1 As a result of the health hazards inherent in the unlimited availability and uncontrolled administration of pesticides and insecticides to both poison handlers and consumers, effective regulation has become an urgent necessity. To this end, a standing Interdepartmental Advisory Committee was established in the Department of Agricultural Technical Services, in which the Department of Health plays a leading part. The activities of the Committee include the consideration of the toxicity of active components in insecticides and pesticides, toxicity of decomposition products, permanence, residue on agricultural products, safety periods between administration and marketing, permissible safe tolerances on marketed agricultural products and processed food. Thus the free use of, inter alia, D.D.T. and other permanent organochloric insecticides has already been drastically limited, and attention is being given to other dangerous agents. An increasing number of new agents is becoming available daily, and their screening is a task which will make even greater demands.

2.2 As a result of the alarming number of cases of different types of poisoning which occur daily in this country and the danger to life entailed by any delay in effective emergency and follow-up treatment, the immediate availability of complete and reliable information, as well as effective treatment facilities, has become an urgent necessity.

2.3 The collection and collation of information on the toxicological characteristics of chemicals, the determination of toxicity, signs and symptoms of poisoning, proper laboratory tests for diagnostic purposes, methods of testing for the identification of poisons, effective antidotes and other methods of treatment is a task which has been undertaken by this Department. A mass of data has already been collected.

2.4 The Division of Poison Control will serve as a central bureau for the compilation of complete data to be supplied to all poison centres which will be situated at strategic points all over the Republic. Negotiations

Onderhandelings met die verskillende Provinsiale Administrasies ten einde tot 'n vergelyk te kom oor die instelling van vergifsentrums en metodes om sulke sentrums doeltreffend te laat funksioneer, sal gedurende 1971 gevoer word.

2.5 Met inagneming van die omstandighede en die behoeftes in hierdie verband is die doel en funksies van die Afdeling Gifstowwebeheer soos volg geformuleer :

Doel:

Om die mens teen toksiese stowwe te beskerm.

Funksies:

(i) Om die toksisiteit van plaagbeheermiddels en ander gifstowwe te bepaal.

(ii) Om veilige drumpelwaardes van plaagbeheermiddels en ander gifstowwe te bepaal.

(iii) Om veilige gebruiksmetodes van plaagbeheermiddels en ander gifstowwe te bepaal.

(iv) Om leiding oor die veilige gebruik van plaagbeheermiddels en ander gifstowwe te gee.

(v) Om 'n gifstowweregister by te hou.

(vi) Om feitelike inligting aan vergifsentrums te verskaf.

(vii) Om diagnoseringsmetodes en behandelingsmetodes in gevalle van vergifting te bepaal.

(viii) Om advies oor die inlysting en registrasie van landbou- en veemiddels te verskaf.

(ix) Om wetgewing te hersien en te wysig.

(x) Om beleid te bepaal, leiding te gee en navrae te beantwoord in verband met toksiese stowwe.

3. STRALINGSBEHEER

3.1 Dit het duidelik geword dat ongekontroleerde blootstelling aan straling, hoë frekwensiegolwe, mikro-golfoonde, infra-rooistrale, ultra-violetstrale, en laser- en radarstrale gevare vir gesondheid en lewe inhou en derhalwe aktiewe en voortdurende aandag vereis in belang van die welsyn van sowel die huidige as toekomstige geslagte.

3.2 Ten einde te verseker dat radium en nukleïen, wat vir diagnostiese en terapeutiese doeleindes asook vir nywerheidsdoeleindes beskikbaar gestel word, veilig geberg, gehanteer, aangewend en die afval veilig weggedoen word, is dit noodsaaklik dat die verbruiker oor die nodige basiese opleiding, kennis en ondervinding beskik. Die keuring van aansoeke om die gebruik van hierdie stowwe en die lisensiering van gebruikers is 'n taak wat op versoek van die Raad op Atoomkrag so spoedig doenlik deur die Departement van Gesondheid oorgeneem moet word.

3.3 X-straalapparaat word in toenemende mate aangewend vir diagnostiese, terapeutiese en industriële doeleindes. Die ondersoek en lisensiering van sulke apparaat en van die persele waar dit gehuisves word, die kontrolering van gebruiksmetodes en die bepaling en gereelde toetsing van blootstellingsbeperkings het 'n dringende noodsaaklikheid geword.

3.4 Ten einde in die voorgaande behoeftes te voorsien, is die doel en funksies van hierdie Afdeling soos volg gestel :

Doel:

Om die mens teen straling afkomstig van elektroniese produkte te beskerm.

Funksies:

(i) Om veiligheidsvereistes by die gebruik van elektroniese produkte te bepaal.

will be conducted with the various Provincial Administrations during 1971 with a view to the establishment of poison centres and the introduction of methods to ensure the efficient functioning of such centres.

2.5 With due regard to the circumstances and the requirements in this connection, the aim and functions of the Division have been formulated as follows :

Aim:

To protect man against toxic substances.

Functions:

(i) To determine the toxicity of pesticides and other poisons.

(ii) To determine safe threshold values of pesticides and other poisons.

(iii) To determine safe methods of use of pesticides and other poisons.

(iv) To give guidance on the safe use of pesticides and other poisons.

(v) To keep a poison register.

(vi) To provide poison centres with factual information.

(vii) To determine diagnostic methods and methods of treatment in cases of poisoning.

(viii) To advise on the scheduling and registration of agricultural preparations and livestock remedies.

(ix) To revise and amend legislation.

(x) To lay down policy, give guidance on and answer enquiries about toxic substances.

3. CONTROL OF IRRADIATION

3.1 It has become apparent that uncontrolled exposure to radiation, high-frequency waves, microwave ovens, infra-red rays, ultra-violet rays and laser and radar endangers health and life and thus demands active and constant attention in the interests of the welfare of both the present and future generations.

3.2 To ensure the safe storage, handling, application and disposal of radium and nucleins which are made available for diagnostic and therapeutic purposes, as well as industrial purposes, it is essential for the consumer to have the necessary basic training, knowledge and experience. The approval of applications for the use of these substances and the licensing of consumers is a task which, at the request of the Atomic Energy Board, must be taken over as soon as possible by the Department of Health.

3.3 X-ray apparatus is being used to an increasing extent for diagnostic, therapeutic and industrial purposes. Examination and licensing of such apparatus and of the premises where it is kept, the control of methods of use, and the determination and regular testing of exposure limits have become an urgent necessity.

3.4 To meet the above-mentioned needs, the aim and functions of this Division have been formulated as follows :

Aim:

To protect man against radiation emanating from electronic products.

Functions:

(i) To determine safety requirements for the use of electronic products.

(ii) Om beskermingsmetodes by die gebruik van verskillende tipes elektroniese produkte te bepaal.

(iii) Om toelaatbare stralingsdosisse te bepaal.

(iv) Om alle persone, liggame en organisasies wat elektroniese produkte gebruik, te registreer.

(v) Om alle elektroniese produkte, en geboue en persele waarin elektroniese produkte gehuisves word, te registreer.

(vi) Om registers, rekords en statistiek van mediese en gesondheidsaspekte wat met straling in verband staan, by te hou.

(vii) Om die wegdoen van radio-aktiewe afval te beheer.

(viii) Om 'n inspeksiediens van elektroniese produkte te beplan, te organiseer en te beheer.

(ix) Om wetgewing te hersien en te wysig.

(x) Om beleid te bepaal, leiding te gee en navrae te beantwoord oor die gebruik van elektroniese produkte.

3.5 'n Aanvang is gemaak met die wysiging van die Volksgezondheidswet, 1919 (Wet 36 van 1919), ten einde voorsiening te maak vir die uitvaardiging van regulasies om uitvoering te gee aan die genoemde funksies. en daar word met die Raad op Atoomkrag onderhandel aangaande die uitoefening van hierdie funksies.

4. NYWERHEIDSGESONDHEID

4.1 Weens die snel toenemende industrialisasie van die Republiek het die sentrale beheer en koördinering van dienste ter beveiliging en bevordering van die gesondheid van die werker 'n dringende vereiste geword. Aangesien dit menslike gesondheid is wat beveilig en bevorder moet word, is dit 'n verantwoordelikheid wat die Departement van Gesondheid moet dra.

4.2 Ooreenstemming oor die mate van oornam van dienste, die instelling van 'n eie mediese inspektoraat en die verrigting van sekere funksies deur die Departement van Gesondheid kon nog nie bereik word nie en die Staatsdienskommissie was nog nie in staat om 'n doelmatige herindelings en afbakening van departementele funksies te maak nie. Die saak geniet voortdurende aandag en onderhandelinge word steeds gevoer met die Departement van Arbeid oor die lewering van die nodige dienste.

4.3 Intussen is die doel en funksies van die Afdeling bepaal en wel soos volg:

Doel:

Om optimale gesondheidsveilige toestande in die werksomgewing te verseker.

Funksies:

(i) Om die toksiese eienskappe van stowwe en skadelike toestande in die werksomgewing te bepaal.

(ii) Om die uitwerking van toksiese stowwe en skadelike toestande in die werksomgewing te bepaal.

(iii) Om toelaatbare drumpelwaardes van toksiese bestanddele en skadelike toestande in die werksomgewing te bepaal.

(iv) Om noodsaaklik vooraanstellings- en periodieke opvolgingsondersoeke van werkers wat aan gesondheidsgevaar blootgestel is, te bepaal.

(v) Om resultate van voorgeskrewe kliniese ondersoeke te evalueer.

(vi) Om werksomgewingsmonsters te evalueer.

(vii) Om leiding oor gesondheidsprobleme in die werksomgewing te gee.

(viii) Om 'n gesondheidsinspeksiediens van nywerhede te beplan, te organiseer en te beheer.

(ix) Om beleid te bepaal, leiding te gee en navrae te beantwoord in verband met gesondheidsveilige toestande in die nywerheidsweë.

(ii) To determine methods of protection in the use of various types of electronic products.

(iii) To determine permissible radiation doses.

(iv) To register all persons, bodies and organisations using electronic products.

(v) To register all electronic products, and buildings and premises where electronic products are kept.

(vi) To keep registers, records and statistics of medical and health aspects connected with radiation.

(vii) To control the disposal of radio-active waste.

(viii) To plan, organise and control an inspection service for electronic products.

(ix) To revise and amend legislation.

(x) To lay down policy, give guidance on and answer enquiries about the use of electronic products.

3.5 A start has been made with the amendment of the Public Health Act, 1919 (Act 36 of 1919), to provide for the making of regulations for the carrying out of the above-mentioned functions, and negotiations are being conducted with the Atomic Energy Board regarding the execution of these functions.

4. OCCUPATIONAL HEALTH

4.1 As a result of the rapidly accelerating industrialisation of the Republic, the central control and co-ordination of services for safeguarding and promoting the health of the worker, have become an urgent necessity, and, since human health is involved, this is the responsibility of the Department of Health.

4.2 It has not been possible as yet to reach agreement on the extent of the take-over of services, the establishment of its own medical inspectorate and the execution of certain functions by the Department of Health, and the Public Service Commission has not yet been able to reassign and demarcate the departmental functions effectively. The matter is still under consideration and negotiations are being conducted with the Department of Labour on the rendering of the necessary services.

4.3 In the meantime the aim and functions of the Division have been laid down as follows:

Aim:

To ensure optimal safe health conditions in the working environment.

Functions:

(i) To determine the toxic properties of substances and harmful conditions in the working environment.

(ii) To determine the effect of toxic substances and harmful conditions in the working environment.

(iii) To determine permissible threshold values of toxic constituents and harmful conditions in the working environment.

(iv) To determine essential pre-appointment examination and periodic follow-up examinations of workers who are exposed to health hazards.

(v) To evaluate results of prescribed clinical examinations.

(vi) To evaluate working environment samples.

(vii) To give guidance on health problems in the working environment.

(viii) To plan, organise and control an industrial health inspection service.

(ix) To lay down policy, give guidance on and answer enquiries about safe health conditions in industry.

5. WATERBESOEDELINGSBEHEER

5.1 Die onoordeelkundige chemiese besoedeling van water deur industriële afval kan gesondheidskadelik wees en water selfs onbruikbaar maak vir huis-houdelike, landboukundige en ander doeleindes. Daar is ook baie toksiese chemiese stowwe wat nie effektief deur konvensionele rioleringsstelsels gehanteer word nie.

5.2 Dit het gevolglik noodsaaklik geword dat 'n voortdurende studie gemaak word van water wat deur nywerheidsuitvloeiing en plaagbeheermiddels besoedel word en dat die bronne van besoedeling streng gekontroleer word. As toesighouer en raadgewer op gesondheidsgebied aan plaaslike owerhede en aan Staatsdepartemente, sal die Departement van Gesondheid 'n steeds groter rol speel in die bewaring, beskerming en benutting van die land se waterbronne.

5.3 Hierdie Afdeling funksioneer nog nie, maar dit word verwag dat daar binnekort 'n aanvang met sy werksaamhede gemaak sal word. Die Afdeling se doelstellings en funksies is soos volg:

Doel:

Om die suiwerheid van water te verhoog.

Funksies:

(i) Om die ontwikkeling van natuurlike en nywerheidsprosesse met betrekking tot die invloed daarvan op die chemiese en biologiese samestelling van water, te bestudeer.

(ii) Om 'n wakende oog oor gesondheidsdrumpelwaardes van water te hou.

(iii) Om leiding te gee oor die wegdoen van afvalwater sodat dit aan gesondheidsvereistes voldoen.

(iv) Om die resultate van toetse en proefnemings met water te interpreteer en te evalueer.

(v) Om 'n inspeksiediens in verband met gesondheidsveilige watervoorsiening te beplan, te organiseer en te beheer.

(vi) Om leiding oor waterinstallasies en veilige watervoorsiening te gee. (Net departementeel.)

(vii) Om beleid te bepaal, leiding te gee en navrae te beantwoord in verband met watersuiwerheid.

6. LUGBESOEDELINGSBEHEER

6.1 Wetgewing.

Die Wet op Voorkoming van Lugbesoedeling, 1965 (Wet 45 van 1965), is nie wesenlik gewysig gedurende die verslagtydperk nie. Slegs geringe wysigings is aangebring, naamlik, in die Tweede Bylae is die omskrywing van proses 30: Yster- en Staalwerke, uitgebrei en prosesse 55 en 56: Galvaniseringswerke en Suikerrietveselbrandingswerke, is daaraan toegevoeg.

6.2 Personeel.

Die geledere van die Nasionale Adviserende Komitee op Lugbesoedeling is aangevul toe dr. G. I. van Rooyen, Assistent-direkteur, Tak Bedryfsgeneeskunde, op 6 Oktober 1970 aangestel is as addisionele lid van die Komitee. Aan die einde van 1970 was die Komitee dus soos volg saamgestel:

Voorsitter: Dr. E. C. Halliday.

Ondervoorsitter: Dr. A. J. Petrick.

Lede: Dr. T. W. Jorden.

Dr. J. P. Kearney.

Mnr. N. A. Lever.

Mnr. C. J. Myburgh.

Dr. J. W. Scott-Millar.

Dr. E. R. Steyn.

Dr. A. Strasheim.

Dr. G. I. van Rooyen.

Mnr. J. J. van Tonder.

5. WATER POLLUTION CONTROL

5.1 The indiscriminate chemical pollution of water through industrial waste could be injurious to health and could even render water unfit for use for domestic, agricultural and other purposes. Similarly many toxic chemical substances are not effectively handled by conventional sewerage systems.

5.2 Consequently it has become essential for a constant study to be made particularly of water that has been polluted by industrial effluents and by pesticides, and for the sources of pollution to be strictly controlled. In its capacity as supervisor and adviser, in the health field, to local authorities and to Government departments, the Department of Health will play an increasing part in the preservation, protection and utilisation of the country's water resources.

5.3 The Division is not functioning as yet, but is expected to do so in the near future. Its aim and functions are as follows:

Aim:

To increase the purity of water.

Functions:

(i) To study the development of natural and industrial processes, with reference to their influence on the chemical and biological composition of water.

(ii) To keep a watchful eye on the health threshold values of water.

(iii) To give guidance on the disposal of waste water so that it satisfies health requirements.

(iv) To interpret and evaluate the results of tests and experiments on water.

(v) To plan, organise and control an inspection service in connection with the supply of wholesome water.

(vi) To give guidance on water installations and safe water supply (only departmental).

(vii) To lay down policy, give guidance on and answer enquiries about water purity.

6. ATMOSPHERIC POLLUTION CONTROL

6.1 Legislation.

The Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965), has not been materially amended during the period under review. Minor amendments were made to the Second Schedule to the Act, in which the description of process 30: Iron Works and Steel Works, was extended, and processes 55 and 56: Galvanising Works and Bagasse Incineration Works, were added.

6.2 Staff.

The membership of the National Air Pollution Advisory Committee was augmented by the appointment, on 6 October 1970, of Dr G. I. van Rooyen, Deputy Director, Industrial Health Branch, as an additional member. At the end of 1970 the Committee was constituted as follows:

Chairman: Dr E. C. Halliday.

Deputy Chairman: Dr A. J. Petrick.

Members: Dr T. W. Jorden.

Dr J. P. Kearney.

Mr N. A. Lever.

Mr C. J. Myburgh.

Dr J. W. Scott-Millar.

Dr E. R. Steyn.

Dr A. Strasheim.

Dr G. I. van Rooyen.

Mr J. J. van Tonder.

6.3 Die Nasionale Adviserende Komitee op Lugbesoedeling het twaalf maal vergader gedurende die verslagtydperk. Daarbenewens is begin om vergaderings met rookbeheerbeamptes van plaaslike besture te hou, waarop leiding oor die implementering van Deel III van die Wet gegee en tegniese inligting en probleme onderling bespreek word.

6.4 Op 30 Junie 1970 het dr. E. C. Halliday afgetree as deelydse Hoofbeampte vir die Bestryding van Lugbesoedeling en is mnr. N. Boegman van Hoofinspekteur tot Hoofbeampte bevorder. Gedurende November en Desember 1970 het mnr. Boegman 'n oorsese studiereis onderneem waartydens hy onder andere ferrolegeringswerke, olieraffinaderye en sementfabrieke in Europa en Amerika besoek het.

6.5 Twee Senior Inspekteurs is ook aangestel.

6.6 **Beheer van skadelike of hinderlike gasse** (Deel II van die Wet).

Daar is tans 65 prosesse in die Tweede Bylae van die Wet. In elke proses word gebruik gemaak van die beste beskikbare metodes om die uitlatings in die lug tot 'n minimum te beperk. Alhoewel die vordering by gevestigde nywerhede stadig is vanweë die buitengewoon hoë koste van lugsuiweringsinstallasies, die hoë uitgawes verbode aan die omskakeling van apparaat en soms die algehele gebrek aan geskikte toerusting, is dramatiese vordering gemaak by etlike pas gevestigde bedrywe.

6.7 Op 31 Desember 1970 was daar reeds 393 nywerhede, wat sowat 540 ingelyste prosesse bedryf, by die Departement geregistreer. Van hierdie nywerhede was 46 reeds in besit van geldige registrasiesertifikate. Gedurende die verslagtydperk het beamptes 920 besoeke aan nywerhede gebring.

6.8 **Beheer van rook** (Deel III van die Wet).

Hierdie faset van lugbesoedelingsbeheer word opgedra aan plaaslike owerhede wie se regsgebiede kragtens artikel 14 (1) van die Wet tot rookbeheergebiede verklaar is. Aan die einde van 1970 was 51 sodanige rookbeheergebiede reeds verklaar. Drie van hierdie plaaslike besture, nl. Durban, Germiston en Johannesburg, het ook beperkte rookbeheerstreke waarin die uitlating van sigbare rook geheel en al verbied word.

6.9 Op aandrang van die Komitee is 'n korrespondensiekursus vir rookbeheerbeamptes deur die Witwatersrandse Kollege vir Gevorderde Tegniese Onderwys gedurende Maart 1970 ingestel en ongeveer 80 kandidate het hulle tot dusver vir die kursus laat inskryf.

6.10 'n Rolprent oor lugbesoedeling is vroeg in 1969 voltooi en deur 'n plaaslike filmmaatskappy gebruik op hul algemene vertoonronde. Na skatting het sowat 360 000 mense die film gesien.

6.11 Die Tweede Nasionale Konferensie oor Lugbesoedeling is gedurende Oktober 1970 in Johannesburg gehou en is onder andere toegesprek deur dr. John Ludwig van die Federale Regering van die Verenigde State van Amerika en mnr. R. E. Waller, wat aan die Britse Lugbesoedelingsnavorsingslaboratoria verbode is. Terselfdertyd was daar by die Konferensie ook 'n uitstalling van die eerste twee rooklose steenkoolstowe wat vir die handel in Suid-Afrika beskikbaar gestel is. Die ontwikkeling van hierdie stowe is aangemoedig deur die Departement omdat dit die skutel mag wees tot die verklaring van rookbeheerstreke in Nie-Blanke woongebiede.

6.3 The National Air Pollution Advisory Committee met 12 times during the period under review. In addition it started holding meetings with the smoke control officers of local authorities. At these advice and guidance on the implementation of Part III of the Act are being given and technical information and problems are discussed.

6.4 On 30 June 1970, Dr E. C. Halliday retired as part-time Chief Air Pollution Control Officer and Mr N. Boegman was promoted from Chief Inspector to Chief Officer. During November and December 1970, Mr Boegman went abroad for a study tour during which he visited, *inter alia*, ferro-alloy works, oil refineries and cement factories in Europe and America.

6.5 Two Senior Inspectors were also appointed.

6.6 **Control of noxious or offensive gases** (Part II of the Act).

At present there are 65 processes in the Second Schedule to the Act. In every process the best available methods are being used to reduce emission into the atmosphere to a minimum. Although progress is slow at established industries as a result of the inordinately high cost of air purification plant, the expence of converting plant and sometimes the complete lack of suitable equipment, dramatic progress is being made by several newly established industries.

6.7 On 31 December 1970, 393 industries, which carry on about 540 scheduled processes, had already been registered with the Department. Of these 46 already had valid registration certificates. During the period under review officers payed 920 visits to industries.

6.8 **Smoke control** (Part III of the Act).

This aspect of the control of atmospheric pollution is entrusted to local authorities whose areas of jurisdiction have been declared smoke control areas under section 14 (1) of the Act. At the end of 1970 51 smoke control areas had been so declared. Three of these local authorities, viz. Durban, Germiston and Johannesburg, also have limited smoke control areas where the emission of visible smoke is completely prohibited.

6.9 At the instance of the Committee, a correspondence course for smoke control officers was introduced in March 1970 by the Witwatersrand College for Advanced Technical Education and so far about eighty candidates have registered for the course.

6.10 A film on atmospheric pollution was completed early in 1969 and was used by a local film company on their general circuit. Approximately 360 000 people are estimated to have seen the film.

6.11 The Second National Conference on Atmospheric Pollution was held in Johannesburg during October 1970 and was addressed *inter alia* by Dr John Ludwig of the Federal Government of the United States of America and Mr R. E. Waller who is attached to the British Atmospheric Pollution Research Laboratories. At the same time the first two smokeless coal stoves to come on to the South African market were on display at the Conference. The development of these stoves is being encouraged by the Department because this might be the key to the declaration of smoke control areas in the Non-White residential areas.

6.12 Stoffbestryding (Deel IV van die Wet).

Op 14 Januarie 1969 is die pligte en bevoegdhede van die Hoofbeampte ten opsigte van hierdie Deel van die Wet vir 'n verdere tydperk van twee jaar aan die Staatsmyningenieur gedelegeer. Staatsgelde is gedurende 1970 beskikbaar gestel vir die aanplanting van gras op mynhope wat agtergelaat is deur mynmaatskappye wat nie meer bestaan nie.

6.13 Sedert Augustus 1970 is daar reeds met die aanplanting van gras op drie mynhope begin. Dit is 'n tydsame proses, want dit duur van drie tot vier jaar voordat die gras ten volle gevestig is. Na skatting sal die aanplanting van gras op die 80 mynhope, waarvoor die Staat verantwoordelikheid aanvaar het, oor 15 jaar voltooi wees.

6.14 Beheer van motorvoertuiguitlaatdampe (Deel V van die Wet).

Verskeie pogings om beheermaatreëls ingevolge die Padverkeersordonnansies ingestel te kry, het misluk. Die Minister, in oorleg met die vier Provinsiale Administrateurs, het egter ingestem dat Deel V van die Wet toegepas word in die regsgebiede van vier plaaslike besture, t.w. Durban, Bloemfontein, Kaapstad en Johannesburg. Regulasies vir die beheer van dieselrook sal na verwagting vroeg in 1971 gepubliseer word.

7. REGISTRASIE VAN MEDISYNE

7.1 Die werksaamhede van die Medisynebeheerraad het gedurende die tydperk 1969/70 aansienlik toegeneem. Farmakologiese klassifikasies is in die *Staatskoerant* gepubliseer ten opsigte van die registrasie van geneesmiddels wat voor 5 Julie 1968 op die Suid-Afrikaanse mark beskikbaar was. Die getal aansoeke om die registrasie van medisyne, en die betaalde registrasiegelde, was soos volg:

| Klassifikasie | Getal aansoeke ontvang | Registrasiegelde ontvang |
|--|--|--------------------------|
| | | R |
| A. <i>Ou middels:</i> | | |
| (a) 1 en 2 (stimulante en depressante van die sentrale senuweestelsel).... | 1 129 | 67 740 |
| (b) (i) 3 (bindweefselmiddels)..... | 495 | 29 700 |
| (ii) 5 (middels met 'n uitwerking op die outonome funksies) | | |
| (iii) 11.3 (eetlustdempers) | | |
| B. <i>Nuwe middels:</i> | | |
| Verskeie klassifikasies..... | 438 | 26 280 |
| | Hiervan is 316 middels reeds goedgekeur vir registrasie en 15 middels is afgekeur. | |

7.2 Jaargelde ten bedrae van R1 420 vir die behoud van registrasie van 71 middels is ontvang.

7.3 Die Inspektoraat het nagenoeg 14 690 km gereis om 181 fabriek te besoek en het 405 inspeksies uitgevoer. Inspeksies word volgens 'n standaard-inspeksielys uitgevoer en sommige fabriek kon eers na 'n derde besoek aan al die vereistes vir goedkeuring voldoen. Fabriek het oor die algemeen 'n aansienlike verbetering getoon met betrekking tot metodes van vervaardiging en kwaliteitsbeheer. Daar is van die provinsiale owerhede verneem dat die aantal geneesmiddels, wat deur hulle aan analitiese toetse onderwerp is en nie aan die vereistes voldoen het nie, afgeneem het. Benewens sy normale pligte gee die Inspektoraat ook baie advies en het hy in hierdie verband 'n opvoedingsaak om te vervul.

6.12 Control of dust (Part IV of the Act).

On 14 January 1969, the duties and powers of the Chief Officer under this Part of the Act were delegated for another two years to the Government Mining Engineer. Public funds were granted in 1970 for the grassing of mine dumps left by mining companies which are now defunct.

6.13 Since August 1970 work has commenced on the grassing of three mine dumps. This is a slow process, since it takes from three to four years for the grass to become properly established. It is expected that the grassing of 80 mine dumps, for which the Government has assumed responsibility, will be completed in about 15 years' time.

6.14 Control of motor vehicle exhaust fumes (Part V of the Act).

Several efforts to introduce control measures in terms of the Road Traffic Ordinances were unsuccessful. The Minister, in consultation with the four Provincial Administrators, agreed however to the implementation of Part V of the Act in the areas of jurisdiction of four local authorities, viz Durban, Bloemfontein, Cape Town and Johannesburg. Regulations for the control of diesel smoke are expected to be published early in 1971.

7. REGISTRATION OF DRUGS

7.1 The activities of the Drugs Control Council increased considerably during 1969/70.

Pharmacological classifications were published in the *Gazette* in respect of the registration of preparations which were available on the South African market before 5 July 1968. The number of applications received for the registration of drugs and the registration fees paid are shown in the following table:

| Classification | Number of applications received | Registration fees received |
|--|---|----------------------------|
| | | R |
| A. <i>Old preparations:</i> | | |
| (a) 1 and 2 (central nervous system stimulants and depressants)..... | 1 129 | 67 740 |
| (b) (i) 3 (connective tissue drugs) | 495 | 29 700 |
| (ii) 5 (drugs affecting autonomic functions) | | |
| (iii) 11.3 (anorexigenics) | | |
| B. <i>New preparations:</i> | | |
| Various classifications..... | 438 | 26 280 |
| | Of these 316 preparations have already been approved for registration and 15 preparations have not been approved. | |

7.2 Annual fees totalling R1 420 were received for the retention of the registration of 71 preparations.

7.3 The Inspectorate travelled approximately 14 690 km to visit 181 factories, where 405 inspections were carried out. Inspections are conducted according to a standard inspection schedule, and some factories could comply with all the requirements for approval only after a third visit. Factories in general showed a considerable improvement in manufacturing methods and quality control. It was understood from the provincial authorities that there has been a decrease in the preparations subjected to analytical tests which did not comply with the requirements. In addition to its normal duties, the Inspectorate frequently gives advice and in this connection it has an educational task to fulfil.

7.4 Op uitnodiging van die Rhodesiese Ministerie van Gesondheid is twee firmas in Bulawayo en twee in Salisbury, wat medisyne in die Republiek van Suid-Afrika bemark, geïnspekteer en in orde bevind.

7.5 Tydelike vrystelling van registrasie ingevolge artikel 21 van die Wet op die Beheer van Medisyne, 1965 (Wet 101 van 1965), is deur 230 applikante aangevra ten opsigte van middels wat vir kliniese toetsdoel-eindes vereis word. Van hierdie aansoeke is 200 goedgekeur.

7.6 Kragtens die Wysigingswet op Geneeshere, Tandartse en Aptekers, 1969 (Wet 44 van 1969), is die taak om stowwe tot vergifte, gewoontevormende medisyne of moontlik nadelige medisyne te verklaar aan die Medisynebeheerraad opgedra. Alle nuwe middels ten opsigte waarvan aansoek om registrasie gedoen moet word, word op grond van hulle samestellings onder 'n geskikte bylae ingedeel.

Daar is ook begin met die aanpassing van die bestaande bylaes by plaaslike en internasionale wetgewing betreffende die bekamping van geneesmiddel-misbruik.

7.7 Die Raad het besluit om farmakologiese klassifikasie 11 (middels met 'n uitwerking op die maagderm-kanaal) van toepassing te maak op die registrasie van geneesmiddels wat voor 5 Julie 1968 op die Suid-Afrikaanse mark beskikbaar was.

8. WETSTOEPASSING

8.1 Die Wette wat toegepas is, was die Wet op Geneeshere, Tandartse en Aptekers, 1928 (Wet 13 van 1928), en die Wet op Voedingsmiddels, Medisyne en Ontsmettingsmiddels, 1929 (Wet 13 van 1929).

Die Wet op Geneeshere, Tandartse en Aptekers, 1928

8.2 Op aanbeveling van die Suid-Afrikaanse Geneeskundige en Tandheelkundige Raad en die Suid-Afrikaanse Aptekerskommissie is etlike wysigings aangebring in die Wet met die oog op die doeltreffender reëling van onderskeidelik die geneeskundige, tandarts- en aptekersprofessies. Hierbenewens is leiding verskaf ten opsigte van die beheermaatreëls vir die beskikbaarstelling van ingelyste stowwe en medisyne.

8.3 Teen die einde van 1970 is die verslag van die Komitee van Ondersoek na die Misbruik van Verdowingsmiddels aan die Minister van Volkswelsyn en Pensioene oorhandig en indien die aanbevelings van daardie Komitee aanvaar word, sal die Wet waarskynlik aansienlik gewysig moet word.

Die Wet op Voedingsmiddels, Medisyne en Ontsmettingsmiddels, 1929

8.4 Hierdie Wet is konsekwent toegepas om die onskadelikheid van voedsel en sekere verbruikersmiddels te probeer verseker en die publiek teen misleiding hieromtrent te beskerm.

8.5 Hierdie Wet, wat sedert sy afkondiging nog nie 'n enkele wysiging ondergaan het nie, moet nou in die lig van veranderde omstandighede gewysig word en daar word beoog om gedurende 1971 die nodige wysigings aan te bring.

III. TAK GESONDHEIDSVOORLIGTING

1. AFDELING GESINSGESONDHEIDSDIENSTE

1.1 Die Staat het voorsiening gemaak vir die gesinsgesondheidsorg van die veelrassige bevolking van die Republiek van Suid-Afrika deur middel van instansies soos plaaslike owerhede, distriksgeneeshere en distriksverpleegdienste. Daarbenewens het vrywillige organisasies dienste gelewer op die besondere gebiede waarin hulle geïnteresseerd is.

7.4 At the invitation of the Rhodesian Ministry of Health two firms in Bulawayo and two in Salisbury which market drugs in the Republic of South Africa were inspected and found satisfactory.

7.5 In all 230 applications were received in terms of section 21 of the Drugs Control Act, 1965 (Act 101 of 1965), for the temporary exemption from registration of drugs required for clinical test purposes. Of these, 200 applications were approved.

7.6 Under the Medical, Dental and Pharmacy Amendment Act, 1969 (Act 44 of 1969), the task of declaring substances to be poisons, habit-forming drugs or potentially harmful drugs has been assigned to the Drugs Control Council. All new preparations, the registration of which has to be applied for, are classified under an appropriate Schedule on the basis of their composition. A start has also been made on the adaptation of the existing Schedules to local and international legislation on the prevention of drug abuse.

7.7 The Council has decided to make pharmacological classification 11 (Drugs acting on the Gastro-intestinal Tract) applicable to the registration of drugs which were available on the South African market before 5 July 1968.

8. LAW ADMINISTRATION

8.1 The statutes administered are the Medical, Dental and Pharmacy Act, 1928 (Act 13 of 1928), and the Food, Drugs and Disinfectants Act, 1929 (Act 13 of 1929).

8.2 The Medical, Dental and Pharmacy Act, 1928.

On the recommendation of the South African Medical and Dental Council and the South African Pharmacy Board several amendments were made to the Act to provide for the better organisation of the medical and dental professions and the pharmaceutical profession, respectively. In addition, guidance was given on the control measures for the supply of scheduled substances and drugs.

8.3 Towards the end of 1970 the Report of the Committee of Inquiry into the Abuse of Drugs was handed over to the Minister of Social Welfare and Pensions, and if the recommendations of that Committee are accepted, the Act will probably have to be amended extensively.

8.4 The Food, Drugs and Disinfectants Act, 1929.

This Act has been consistently applied to ensure that food and certain consumer products are not harmful, and to safeguard the public against misrepresentations.

8.5 This Act, which has not been amended since its promulgation, now requires amendment in the light of changed conditions, and it is intended to make such amendments during 1971.

III HEALTH EDUCATION BRANCH

1. DIVISION OF FAMILY HEALTH SERVICES

1.1 The State has provided family health care for the multiracial population of the Republic of South Africa, using agencies such as local authorities, district surgeons and district nursing services. In addition, voluntary organisations have provided services in the particular field in which they are interested.

1.2 Die Staatsdepartement van Gesondheid het plaaslike owerhede vir die lewering van dienste gesubsidieer en het vrywillige organisasies met bydraes gesteun.

1.3 Voorkomende gesinsgesondheidsdienste is by gesondheidsentrums en klinieke aangebied en die vernameste werksaamhede is op die gesondheid van moeder en kind toegespits. Daar was 'n toenemende bewustheid van die behoefte aan uitbreiding van die bestaande dienste ten einde gesondheidsorg ook vir die ander lede van die gesin beskikbaar te stel.

1.4 Dienste wat gelewer is, het voorgeboortelike sorg, verloskunde, nageboortelike sorg, gesinsbeplanning, gesondheidsdienste vir babas en voorskoolse kinders, immunisering en die versorging van oues van dae ingesluit.

1.5 Die nuwe Afdeling Gesinsgesondheidsdienste het gedurende 1970 onder die Direkteur van Gesondheidsvoorsorging tot stand gekom. Die Departement se doel was om die gehalte van hierdie dienste deur die aanpassing en uitbreiding van bestaande fasiliteite te verbeter. Koördinasie deur die Hoofkantoor en die voorkoming van duplisering en fragmentasie van dienste is as noodsaaklik beskou. Dit het 'n tydperk van oriëntasie vereis, waarin die beskikbare gesondheidsdienste aan streekkantore, plaaslike owerhede, ens., dwarsdeur die land bekend gestel is.

1.6 Waar distriksklinieke in die Bantoeuistande bestaan, is 'n aantal voorkomende gesondheidsdienste beskikbaar gestel. Daar is begin met die beplanning van 'n uitgebreide gemeenskapsgebaseerde en hospitaalgesentreerde gesondheidsdiens wat volledige gesondheidsorg vir die individu sal verskaf, deur die voorkomende en genesende aspekte van gesondheid te kombineer. Weens die tekort aan dokters in die Tuislande, is besondere klem gelê op die moontlikheid daarvan om van verpleegsters met die nodige opleiding gebruik te maak vir die lewering van gesinsgesondheidsdienste onder die leiding en beheer van die hospitaalpersoneel.

2. GESINSBEPLANNINGSDIENSTE

2.1 Die Departement het die uitbreiding van gesinsbeplanningsdienste vir alle bevolkingsgroepe, gelewer deur plaaslike owerhede, distriksgeneesher, distriksverpleegdienste en hospitale aktief aangemoedig. Aangesien die wanbalans van die bevolkingsaanwas ernstige gevolge op gesondheids-ekonomiese en sosiologiese gebied het, is gevoel dat hierdie uitbreiding besondere voorkeur moet geniet. Die beleid van die Departement is dat gesinsbeplanning 'n integrerende deel van alle voorkomende en genesende gesondheidsdienste moet uitmaak.

2.2 Die volgende tabel dui die toename in die getalle vir alle bevolkingsgroepe aan:

| Bevolkingsgroep | 1960 | 1970 |
|-----------------|------------|------------|
| Blankes..... | 3 088 492 | 3 750 716 |
| Kleurlinge..... | 1 509 258 | 2 018 533 |
| Asiërs..... | 477 125 | 620 422 |
| Bantoes..... | 10 927 922 | 15 057 599 |
| Totaal..... | 16 002 797 | 21 447 270 |

2.3 Volgens die beskikbare statistieke het die volgende getalle vroue van baarsame leeftyd die gesinsbeplanningsklinieke besoek:

| | |
|---------|---------|
| 1969 | 1970 |
| 406 367 | 457 278 |

1.2 The Government Department of Health has subsidised local authorities for the rendering of services and has assisted voluntary organisations with grants.

1.3 Preventive family health services were offered in health centres and clinics, the main activity being directed towards maternal and child health. There was a growing awareness of the need to expand existing services to provide health care for the other members of the family unit as well.

1.4 Services provided included antenatal care, midwifery, postnatal care, family planning, health services for infants and pre-school children, immunisation and care of the aged.

1.5 During 1970 the new Division of Family Health Services was established under the Director of Health Education. The Department's aim was to improve the quality of these services by modifying and expanding existing facilities. Co-ordination by Head Office and the avoidance of duplication and fragmentation of services were considered necessary. This required a period of orientation, in which regional offices, local authorities, etc., throughout the country were familiarised with the health services available.

1.6 In Bantu Homelands, some preventive health services were provided in district clinics where these existed. Planning was commenced on a comprehensive community-based and hospital-centred health service to provide complete health care for the individual combining both the preventive and the curative aspects of health. With the scarcity of doctors in the Homelands, particular emphasis was laid on the possibility of using suitably trained nurses for the rendering of family health services under the direction and control of hospital staff.

2. FAMILY PLANNING SERVICES

2.1 The Department actively encouraged the expansion of family planning services rendered by local authorities, district surgeons, district nursing services and hospitals for all population groups. As the imbalance of population growth has serious implications in the fields of health, economics and sociology, such expansion was considered to be of high priority. The policy of the Department is that family planning should be an integral part of all preventive and curative health services.

2.2 The following table reflects the increase in the number of all population groups:

| Population group | 1960 | 1970 |
|------------------|------------|------------|
| Whites..... | 3 088 492 | 3 750 716 |
| Coloureds..... | 1 509 258 | 2 018 533 |
| Asians..... | 477 125 | 620 422 |
| Bantu..... | 10 927 922 | 15 057 599 |
| Total..... | 16 002 797 | 21 447 270 |

2.3 Available statistics show that the following numbers of women of child-bearing age attended family planning clinics:

| | |
|---------|---------|
| 1969 | 1970 |
| 406 367 | 457 278 |

2.4 Die reeks voorbehoedmiddels wat deur die Departement versprei is, is uitgebrei om te verseker dat nuwe en doeltreffende metodes beskikbaar gestel word.

2.5 Die volgende materiale is versprei:

| Tipe | 1969 | 1970 |
|-------------------------------|---------|---------|
| Orale voorbehoedmiddels..... | 413 585 | 555 615 |
| Intra-uterientoestelle..... | 18 742 | 10 705 |
| Depo-Provera-inspuitings..... | 34 976 | 60 600 |

2.6 Plaaslike owerhede het hulle eie voorrade aangekoop en is deur die Departement terugbetaal.

2.7 Gesondheidsvoorligting in verband met gesinsbeplanning is grotendeels op 'n persoon-tot-persoon-grondslag aangebied deur gesondheidswerkers wat vir gesinsorg verantwoordelik is. Verder is groepbyeenkomste en lesings, waarvoor van oudiovisuele hulpmiddels soos films en gedrukte materiaal gebruik gemaak is, vir die verskillende gemeenskapsgroepe gereël.

2.8 Sommige groter plaaslike owerhede was in staat om 'n afname in die geboortesifer van hulle Nie-Blanke bevolking aan te dui.

AFDELING EPIDEMIOLOGIE EN STATISTIEK

3. EKOLOGIE

3.1 Bilharziase*

Die werk wat gedurende 1969 en 1970 deur die Departement in verband met bilharziase gedoen is, was grotendeels dieselfde as dié wat in die tydperk 1965 tot 1968 gedoen is. Die maatreëls wat getref is, is op beheer en, in sommige gebiede en gevalle, op uitwissing gemik.

3.1.1 *Ondersoeke i.v.m. die menslike besmettingsyfer.*—Urine- en ontlastingopnames word jaarliks op Bantoeskoolkinders in hoogs endemiese gebiede van Natal en Noord-Transvaal uitgevoer. Hierdie opnames het twee basiese oogmerke:

(1) Om gebiede met 'n hoë voorkomssifer te identifiseer; en

(2) om die doeltreffendheid van bestrydingsmaatreëls te bepaal.

Nadat menslike gevalle deur middel van die opnames geïdentifiseer is, is chemoterapie in die vorm van die nuwe enkeldosisbehandeling toegepas. Oor die algemeen het hierdie nuwe behandeling baie suksesvoller geblyk te wees as vorige maatreëls wat aangewend is.

3.1.2 *Ondersoeke i.v.m. slakverspreiding en voorkoms.*—Ten tyde van die opnames onder mense, is daar ook pogings aangewend om die waterlope in die gebiede te ondersoek vir die volgende doeleindes:

(1) Om menslike besmettingsyfers met die teenwoordigheid van en die talrykheid van intermedieëre slakgashere te korreleer;

(2) om plekke van menslike kontak aan te wys; en

(3) om die doeltreffendheid van bestrydingsmaatreëls te evalueer.

Inligting wat deur ondersoeke van mense en slakke verkry is, is gekombineer om fokusse te bepaal wat as die vernaamste punte vir bestryding of pogings tot uitwissing kan dien. Nuwe slakdoders is gebruik en het in sekere beperkte toestande suksesvol geblyk te wees.

* Sien ook 3.9 Sentrum vir Mediese Ekologie, 3.9.1 Bilharzia-projek.

2.4 The range of contraceptive materials distributed by the Department was extended in order to ensure that new and effective methods were available.

2.5 The following materials were distributed:

| Type | 1969 | 1970 |
|------------------------------|---------|---------|
| Oral contraceptives..... | 413 585 | 555 615 |
| Intra-uterine devices..... | 18 742 | 10 705 |
| Depo-Provera injections..... | 34 976 | 60 600 |

2.6 Local authorities purchased their own supplies and were reimbursed by the Department.

2.7 Health education in family planning has been provided largely on a person-to-person basis by health workers responsible for family care. In addition, group meetings and lectures have been arranged for the various community groups, use being made of audio-visual aids such as films and printed matter.

2.8 Some larger local authorities have been able to report a decrease in the birth rate of their Non-White population.

DIVISION OF EPIDEMIOLOGY AND STATISTICS

3. ECOLOGY

3.1 Bilharziasis*

The work of the Department on bilharziasis during the years 1969 and 1970 continued much the same as during the period 1965 to 1968, the measures taken being directed towards control and, in some areas and instances, eradication.

3.1.1 *Human infection rate investigations.*—Urine and faeces surveys are conducted each year of Bantu schoolchildren in highly endemic areas of Natal and the Northern Transvaal. These surveys serve two basic purposes:

(1) To identify areas of high incidence; and

(2) to determine the effectiveness of control measures.

Upon identification of human cases through the surveys, chemotherapy in the form of the new single-dose treatment was applied. Overall this new single-dose treatment has proved far more successful than previous measures utilised.

3.1.2 *Snail distribution and prevalence investigations.*—At the time of the human surveys attempts were also made to survey the watercourses in the areas for the following purposes:

(1) To correlate human infection rates with the presence and abundance of snail intermediate hosts;

(2) to pinpoint sites of human contact; and

(3) to evaluate the effectiveness of control measures.

The information from the human and snail surveys was combined in order to determine foci to serve as the main points for control or attempted eradication. New molluscicides have been used and under certain limited conditions have proved successful.

* See also 3.9 Medical Ecology Centre, 3.9.1 Bilharzia Project.

3.1.3 *Formulering van beleid.*—In die grootste gedeeltes van Natal en die Oos-Transvaalse Laëveld waar normale slakbestrydingsmaatreëls ondoeltreffend is, is die enigste manier om die siekte te beheer die uitskakeling van menslike aanraking met besmette water. Pogings word aangewend om die samewerking van die owerhede in die Departement van Bantoe-administrasie en -ontwikkeling te verkry by die toepassing van hierdie doeltreffende metode van omgewingsbeheer, wat sal beteken dat Bantoes weg van bronne van besmetting hervestig en van voldoende water- en sanitêre fasiliteite voorsien word.

3.2 Malaria

3.2.1 *Die omvang van malaria.*—Die voorkoms van malaria gedurende 1969 (223 gevalle is aangegee) en 1970 (134 gevalle) kan nie as buitengewoon beskou word nie. Dit kan aan 'n gemiddelde reënval gedurende hierdie tydperk toegeskryf word. Die betreklik hoë voorkomssyfer onder die Bantoes in Noord-Transvaal gedurende 1969, kan regstreeks in verband gebring word met hoë reënval in die Guyanigebied van die Letabadistrik en die Shingwedzigebed van die Sibasadistrik, waar die meeste van die gevalle voorgekom het. Die malariagevalle waarvan gedurende die jare 1960 en 1970 aangifte gedoen is, is as volg:

| Gebied/Region | Blankes/ Whites | | Bantoes/ Bantu | | Kleurlinge/ Coloureds | | Asiërs/ Asians | | Totaal/ Total | |
|--|--------------------|------|-------------------|------|--------------------------|------|-------------------|------|------------------|------|
| | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| Noord-Transvaal/Northern Transvaal..... | 2 | 6 | 119 | 41 | 0 | 0 | 0 | 0 | 121 | 47 |
| Suid-Transvaal/Southern Transvaal..... | 34 | 25 | 28 | 28 | 2 | 1 | 0 | 0 | 64 | 54 |
| Oranje-Vrystaat/Orange Free State..... | 0 | 0 | 3 | 9 | 0 | 0 | 0 | 0 | 3 | 9 |
| Natal..... | 20 | 9 | 11 | 7 | 0 | 1 | 3 | 3 | 34 | 20 |
| Wes- en Oos-Kaapland/Western and Eastern Cape..... | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 |
| TOTAAL/TOTAL..... | 57 | 43 | 161 | 85 | 2 | 3 | 3 | 3 | 223 | 134 |

Immigrante-Bantoe-arbeiders wat op kontrak die Republiek binnekom, het voor hul binnekoms chemoterapie ontvang, maar die probleem van ongemagtigde reise of besoeke oor die grense het nog tot gevolg dat draers van die siekte in die Republiek ingevoer is. Die vernaamste bron van hierdie insypeling is Mosambiek.

3.2.2 *Veldwerk.*—Meer as 100 000 bloedsmeres is jaarliks deur die personeel van die Annecke-instituut, Tzaneen, ondersoek. Dit is gedoen in 'n poging om draers ("gesonde" persone wat die parasiet huisves) te identifiseer en om positiewe gevalle onder persone met vermoedelike malariasimptome wat in hospitale en klinieke opgeneem word, te ontdek. Die meeste van die skyfies wat ondersoek is, was van die Noord-Transvaalse gebied afkomstig en die res het uit Natal en Oos-Capriwi gekom. Alle mensewonings en buitegeboue langs die noordelike en oostelike grense van Transvaal waar malaria nog oorgedra kan word, is gereeld met nawerkende insekdodende middels bestuif om malariamuskiete te bestry. Weens die beperkte voorkoms van malaria en die opvallende afname in die getalle malariamuskiete in Natal is bestrydingsmaatreëls daar gestaak. Gereelde ondersoeke van beide mense en muskiete word steeds in Natal uitgevoer om enige uitbreking van die siekte onmiddellik op te spoor.

Opmnames van larwes en volwasse muskiete word steeds deur die streekgesondheidspersoneel en deur die tegniese personeel van die Annecke-instituut uitgevoer.

3.1.3 *Formulation of policy.*—In most of Natal and in the lowveld areas of the Eastern Transvaal, where normal snail control measures are ineffective, the only means of controlling the disease involves eliminating human contact with infected waters. Attempts are being made to gain the co-operation of the authorities in the Department of Bantu Administration and Development in the application of this effective means of environmental control, which would involve relocating and settling Bantu away from sources of infection and providing them with adequate facilities for water and sanitation.

3.2 Malaria

3.2.1 *Incidence of malaria.*—The incidence of malaria during the years 1969 (223 cases notified) and 1970 (134 cases) cannot be considered unusual. This can be attributed to an average rainfall during that period. The rather high incidence among Bantu in the Northern Transvaal during 1969 can be directly associated with high rainfall in the Guyani area of the Letaba District, and the Shingwedzi area of the Sibasa District, in which most of the cases occurred. The numbers of notified cases of malaria during the years 1969 and 1970 were as follows:

Immigrant Bantu labourers on contract were given chemotherapy before entry into the Republic, but the problem remains of unauthorised journeys or visits across borders resulting in the importation of carriers of the disease into the Republic. The primary source of these importations is Mozambique.

3.2.2 *Field work.*—Over 100 000 blood smears were examined annually by the staff at the Annecke Institute, Tzaneen. This was done in an effort to identify carriers ("healthy" persons harbouring the parasite) and to detect positive cases among those persons entering clinics and hospitals with suspected symptoms of malaria. The majority of the slides examined were from the Northern Transvaal region, the rest having come from Natal and the Eastern Capriwi. All human habitations and outbuildings along the northern and eastern borders of the Transvaal where malaria may still be transmitted were sprayed regularly with residual insecticide to combat malarial mosquitoes. The limited incidence of malaria and the pronounced decrease in numbers of malarial mosquitoes in Natal have resulted in the discontinuance of control measures. Regular surveys of both humans and mosquitoes are still being carried out in Natal in order to detect any outbreak of the disease immediately.

Larval and adult mosquito surveys are still being conducted by the regional health staff and by the technical staff at the Annecke Institute.

3.3 Pes*

Sedert die uitbrekings van pes in die Oranje-Vrystaat en Lesotho gedurende 1968 is daar nog geen menslike gevalle van pes of enige grootskaalse vrektes onder knaagdier by die Departement aangegee nie.

3.4 Poliomiëlitis

Onderstaande twee tabelle toon die getal gevalle van poliomiëlitis wat gedurende die jare 1966 tot 1970 vir die verskillende bevolkingsgroepe aangegee is, volgens ouderdomsgroepe in Tabel 3.4.1 en volgens stedelike en plattelandse gevalle in Tabel 3.4.2.

TABEL 3.4.1.

| Jaar | Blankes | | Kleurlinge | | Asiërs | | Bantoes | | Totaal | | Alle ouderdomsgroepe | Persent onder 5 jaar |
|------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|----------------------|----------------------|
| | Onder 5 jaar | Bo 5 jaar | Onder 5 jaar | Bo 5 jaar | Onder 5 jaar | Bo 5 jaar | Onder 5 jaar | Bo 5 jaar | Onder 5 jaar | Bo 5 jaar | | |
| 1966 | 10 | 1 | 28 | 2 | 13 | 2 | 329 | 46 | 380 | 51 | 431 | 88,2 |
| 1967 | 1 | 2 | 6 | 1 | 0 | 0 | 46 | 11 | 53 | 14 | 67 | 79,1 |
| 1968 | 3 | 2 | 46 | 2 | 2 | — | 326 | 42 | 377 | 46 | 423 | 89,1 |
| 1969 | 6 | 6 | 22 | 2 | 12 | 3 | 640 | 83 | 680 | 94 | 774 | 87,7 |
| 1970 | — | — | 5 | — | 1 | — | 84 | 13 | 90 | 13 | 103 | 87,3 |

TABEL 3.4.2.

| Jaar | Blankes | | Kleurlinge | | Asiërs | | Bantoes | | Totaal | | |
|-----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|--------|
| | Platteland | Stedelik | Platteland | Stedelik | Platteland | Stedelik | Platteland | Stedelik | Platteland | Stedelik | TOTAAL |
| 1966..... | 1 | 10 | 7 | 23 | 5 | 10 | 239 | 136 | 252 | 179 | 431 |
| 1967..... | 1 | 2 | — | 7 | — | — | 29 | 28 | 30 | 37 | 67 |
| 1968..... | 1 | 4 | 4 | 44 | — | 2 | 156 | 212 | 161 | 262 | 423 |
| 1969..... | 2 | 10 | 12 | 12 | 6 | 9 | 549 | 174 | 569 | 205 | 774 |
| 1970..... | — | — | 4 | 1 | — | 1 | 68 | 29 | 72 | 31 | 103 |

Dit is duidelik uit die tabelle dat daar gedurende 1968 en 1969 'n aansienlike toename in aangiftes was in vergelyking met die syfers vir 1967 en dat meer as 87 persent van alle aangiftes gevalle was van kinders onder vyfjarige leeftyd. Die kinders is gebore in die tydperk na die nasionale immuniseringsveldtog wat in 1961 van stapel gestuur is. Die feit dat so baie jong kinders polio opgedoen het, kan grotendeels toegeskryf word aan onkunde of nalatigheid van die kant van ouers of voogde ten opsigte van immunisering teen poliomiëlitis.

In laasgenoemde verband kan genoem word dat, ingevolge die bepalinge van die Regulasies afgekondig by Goewermentskennisgewing R. 1989 van 27 Desember 1963 (Immunisering teen Poliomiëlitis), elke ouer of voog met die registrasie van die geboorte van 'n kind amptelike kennisgewing van vereistes ten opsigte van verpligte immunisering ontvang. Elke immigrant ontvang dieselfde kennisgewing by sy aankoms in die Republiek. Die Regulasies is ook selfverduidelikend vir sover dit immuniseringsfasiliteite betref.

Die Departement het ook 'n uitgebreide voorligtingsprogram ten opsigte van immunisering teen polio. Uit sowel die Departementele Hoofkantoor as Streekkantore word, na gelang van omstandighede, verklarings deur middel van die pers en die radio (veral Radio Bantoe) uitgereik oor die voorkoms van polio en die statutêre verpligtings van ouers, voogde en immigrante. Geskikte radiopraatjies is ook deur die Departement opgestel, waarvan veral deur Radio Bantoe gereeld gebruik gemaak word. Insgelyks is materiaal ook aan die Departement van Inligting vir vrystelling beskikbaar gestel.

3.3 Plague*

Since the outbreaks of plague in the Orange Free State and Lesotho in 1968, no human cases of plague or any large-scale rodent mortalities have been reported to the Department.

3.4 Poliomyelitis

The following two tables reflect the number of notified cases of poliomyelitis among the various population groups during the years 1966 to 1970, according to age groups in Table 3.4.1 and according to urban and rural cases in Table 3.4.2.

TABLE 3.4.1.

| Year | Whites | | Coloured | | Asians | | Bantu | | Total | | All age groups | Percentage under 5 years |
|------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|----------------|--------------------------|
| | Under 5 years | Over 5 years | Under 5 years | Over 5 years | Under 5 years | Over 5 years | Under 5 years | Over 5 years | Under 5 years | Over 5 years | | |
| 1966 | 10 | 1 | 28 | 2 | 13 | 2 | 329 | 46 | 380 | 51 | 431 | 88,2 |
| 1967 | 1 | 2 | 6 | 1 | 0 | 0 | 46 | 11 | 53 | 14 | 67 | 79,1 |
| 1968 | 3 | 2 | 46 | 2 | 2 | — | 326 | 42 | 377 | 46 | 423 | 89,1 |
| 1969 | 6 | 6 | 22 | 2 | 12 | 3 | 640 | 83 | 680 | 94 | 774 | 87,7 |
| 1970 | — | — | 5 | — | 1 | — | 84 | 13 | 90 | 13 | 103 | 87,3 |

TABLE 3.4.2.

| Year | Whites | | Coloureds | | Asians | | Bantu | | Total | | |
|-----------|--------|-------|-----------|-------|--------|-------|-------|-------|-------|-------|-------|
| | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | TOTAL |
| 1966..... | 1 | 10 | 7 | 23 | 5 | 10 | 239 | 136 | 252 | 179 | 431 |
| 1967..... | 1 | 2 | — | 7 | — | — | 29 | 28 | 30 | 37 | 67 |
| 1968..... | 1 | 4 | 4 | 44 | — | 2 | 156 | 212 | 161 | 262 | 423 |
| 1969..... | 2 | 10 | 12 | 12 | 6 | 9 | 549 | 174 | 569 | 205 | 774 |
| 1970..... | — | — | 4 | 1 | — | 1 | 68 | 29 | 72 | 31 | 103 |

It is clear from the tables that, during 1968 and 1969, there was a considerable increase in notifications on the figures for 1967, and that over 87 per cent of all notifications were cases of children under the age of five years. The children were born in the period after the launching of the national immunisation campaign in 1961. The fact that so many young children contracted polio may be ascribed largely to ignorance or negligence on the part of parents or guardians in the matter of immunisation against poliomyelitis.

In this regard it may be mentioned that, in terms of the provisions of the regulations published under Government Notice R. 1989, dated 27 December 1963 (Immunisation against Poliomyelitis), every parent or guardian, on registering the birth of a child, receives an official notice regarding the requirements for compulsory immunisation. Every immigrant receives the same notice on arrival in the Republic. The regulations are also self-explanatory in so far as immunisation facilities are concerned.

The Department also undertakes an extensive education programme on immunisation against polio. Statements are issued from both the Departmental Head Office and Regional Offices, as the case may be, through the media of the press and radio (particularly Radio Bantu) on the incidence of polio and the statutory obligations of parents, guardians and immigrants. The Department has also prepared suitable radio talks, which are regularly used by Radio Bantu in particular. At the same time, material is also made available to the Department of Information for release.

* Sien ook 3.9 Sentrum vir Mediese Ekologie. 3.9.2 Pesnavorsing.

* See also 3.9. Medical Ecology Centre, 3.9.2. Plague Research.

Van 1966 af is die volgende getal dosisse sluk-entstof teen polio in die onderskeie gesondheidsreke toegedien:

| Jaar | Noord-Transvaal | Suid-Transvaal | Oranje-Vrystaat | Natal | Oos-Kaapland | Wes-Kaapland | Totaal |
|------|-----------------|----------------|-----------------|---------|--------------|--------------|-----------|
| 1966 | 171 649 | 641 781 | 407 569 | 459 388 | 332 297 | 557 501 | 2 570 485 |
| 1967 | 193 418 | 628 064 | 241 249 | 383 828 | 506 260 | 383 175 | 2 336 494 |
| 1968 | 351 161 | 602 303 | 169 330 | 402 293 | 368 305 | 267 174 | 2 160 566 |
| 1969 | 385 250 | 1 003 173 | 210 385 | 793 914 | 165 931 | 415 441 | 2 974 094 |
| 1970 | 421 100 | 714 648 | 209 099 | 647 714 | 523 352 | 368 726 | 2 884 639 |

Tensy alle nuwe aankomelinge betyds met die sluk-entstof geïmmuniseer word en minstens 70-80 persent van die vatbare bevolking immuun teen die siekte is, kan daar stellig verwag word dat polio in die toekoms weer sal toeneem. Die sluk-entstof word deur die Staat gratis aan alle plaaslike owerhede verskaf, en mits laasgenoemde, soos die Departement, hulle plig doen en alle vatbares betyds deur toediening van sluk-entstof beskerm word, behoort daar geen toename in die getal poliogevalle plaas te vind nie.

3.5 Hondsdolheid

3.5.1 *Menslike besmetting.*—Twee noodlottige menslike gevalle van hondsdolheid is gedurende 1969 by die Departement aangegee en net een geval gedurende 1970.

Die getal menslike kontakte wat behandeling ontvang het, die getal bevestigde hondsdol diere en die getal landdrosdistrikte waar hondsdolheid voorgekom het, was gedurende 1969 en 1970 as volg:

| | Kaapprovinsie/ Cape Province | | Natal | | Oranje-Vrystaat/ Orange Free State | | Transvaal | | Totaal/Total | |
|--|---------------------------------|------|-------|------|---------------------------------------|------|-----------|------|--------------|------|
| | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| Menslike kontakte/Human contacts | 10 | 10 | 0 | 3 | 67 | 44 | 17 | 14 | 94 | 71 |
| Hondsdol diere/Rabid animals..... | 23 | 35 | 0 | 3 | 82 | 72 | 28 | 32 | 133 | 145 |
| Landdrosdistrikte/Magisterial Districts..... | 18 | 19 | 0 | 3 | 29 | 22 | 9 | 18 | 56 | 62 |

Die getal landdrosdistrikte in die Oranje-Vrystaat wat geraak word, het geleidelik verminder van 36 in 1968, maar baie faktore is daarby betrokke en dit dui nie noodwendig op 'n afname van hondsdolheid in daardie gebied nie.

3.5.2 *Dierebesmetting.*—Gedurende 1969 en 1970 was die verspreiding van hondsdol diere as volg:

| Diersoorte/Animals | Kaapprovinsie/ Cape Province | | Natal | | Oranje-Vrystaat/ Orange Free State | | Transvaal | | Totaal/Total | |
|---------------------------------|---------------------------------|-----------|----------|----------|---------------------------------------|-----------|-----------|-----------|--------------|------------|
| | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| Meerkatte/Meercats..... | 13 | 14 | 0 | 0 | 40 | 43 | 5 | 15 | 58 | 72 |
| Beeste/Cattle..... | 0 | 4 | 0 | 0 | 28 | 18 | 8 | 6 | 36 | 28 |
| Honde/Dogs..... | 1 | 2 | 0 | 1 | 5 | 3 | 11 | 8 | 17 | 14 |
| Katte/Cats..... | 4 | 3 | 0 | 1 | 3 | 4 | 1 | 2 | 8 | 10 |
| Wildekatte/Wild cats..... | 1 | 6 | 0 | 0 | 2 | 2 | 1 | 0 | 4 | 8 |
| Muskeljaatkatte/Civet cats..... | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 2 |
| Jakkalse/Jackals..... | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Skape/Sheep..... | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 3 |
| Muishonde/Polecats..... | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Onbekend/Unknown..... | 2 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 5 | 4 |
| TOTAAL/TOTAL..... | 23 | 35 | 0 | 3 | 82 | 75 | 28 | 32 | 133 | 145 |

Hondsdolheid kom steeds die algemeenste voor in die Oranje-Vrystaat, waar dit nog oorwegend aangetref word. Die hondsdolheidprobleem word steeds in samewerking met die Departement van Landbou-tegniese Dienste (Veeartsenykundige Velddienste) ondersoek.

Since 1966, the following number of doses of oral polio vaccine have been administered in the respective health regions:

| Year | Northern Transvaal | Southern Transvaal | Orange Free State | Natal | Eastern Cape | Western Cape | Total |
|------|--------------------|--------------------|-------------------|---------|--------------|--------------|-----------|
| 1966 | 171 649 | 641 781 | 407 569 | 459 388 | 332 297 | 557 801 | 2 570 485 |
| 1967 | 193 418 | 628 064 | 241 249 | 383 828 | 506 260 | 383 175 | 2 336 494 |
| 1968 | 351 161 | 602 303 | 169 330 | 402 293 | 368 305 | 267 174 | 2 160 566 |
| 1969 | 385 250 | 1 003 173 | 210 385 | 793 914 | 165 931 | 415 441 | 2 974 094 |
| 1970 | 421 100 | 714 648 | 209 099 | 647 714 | 523 352 | 368 726 | 2 884 639 |

Unless all new arrivals are immunised with the oral vaccine in good time, and at least 70-80 per cent of the susceptible population are immune to the disease, polio can definitely be expected to increase again in the future. The oral vaccine is supplied to all local authorities by the State free of charge, and provided they, like the Department, do their duty and protect all those who are susceptible by the timely administration of the oral vaccine, there should, however, be no increase in the number of cases of polio.

3.5 Rabies

3.5.1 *Human infection.*—Two fatal cases of rabies in humans were reported to the Department during 1969 and only one case was reported during 1970.

During 1969 and 1970 the number of human contacts who received treatment, the number of animals confirmed as rabid, and the number of magisterial districts where rabies occurred were as follows:

The number of magisterial districts affected in the Orange Free State has steadily declined from 36 districts in 1968, but because of the many factors involved this does not necessarily indicate a decline of rabies in that area.

3.5.2 *Animal infection.*—The distribution of rabid animals during 1969 and 1970 was as follows:

Rabies continues to occur most commonly in the Orange Free State where the meercat is still the principal rabid animal.

The problem of rabies is still being investigated in co-operation with the Department of Agricultural Technical Services (Veterinary Field Services).

3.6 Pokkies

Van 1956 tot 1959 het daar nie 'n enkele geval van pokkies in Suid-Afrika voorgekom nie. Die getal gevalle wat gedurende die jare 1961-1970 aangegee is, word in onderstaande tabel aangedui:

| | |
|------|-----|
| 1961 | 8 |
| 1962 | 103 |
| 1963 | 254 |
| 1964 | 301 |
| 1965 | 191 |
| 1966 | 256 |
| 1967 | 43 |
| 1968 | 81 |
| 1969 | 246 |
| 1970 | 117 |

Die verspreiding van die gevalle van pokkies (*Variola minor*) wat gedurende 1969 en 1970 aangegee is, word in die Tabel hieronder volgens bevolkingsgroep en gezondheidstreek aangedui:

| Streek/Region | Blankes/Whites | | Kleurlinge/Coloureds | | Asiërs/Asians | | Bantoes/Bantu | | Totaal/Total | |
|--|----------------|------|----------------------|------|---------------|------|---------------|------|--------------|------|
| | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| Suid-Transvaal/Southern Transvaal.. | — | — | — | — | — | — | 202 | 66 | 202 | 66 |
| Noord-Transvaal/Northern Transvaal | — | — | — | — | — | — | 3 | 55 | 3 | 55 |
| Natal..... | — | — | — | — | — | — | 26 | — | 26 | — |
| Oranje-Vrystaat/Orange Free State... | — | — | — | — | — | — | 15 | — | 15 | — |
| Wes- en Oos-Kaapland/Western and Eastern Cape..... | — | — | — | — | — | — | — | — | — | — |
| TOTAAL/TOTAL..... | — | — | — | — | — | — | 246 | 121 | 246 | 121 |

Daar moet op gewys word dat dit uiters noodsaaklik bly dat alle vatbare persone in die bevolking suksesvol teen pokkies ingeënt word. As gevolg veral van die toename in die voorkoms van pokkies in Transvaal, is dit van die grootste belang dat ook werkgewers van Nie-Blanke arbeiders en Bantoehoofmanne hulle verpligtinge ingevolge die bepalings van die Inentingsregulasies nakom. Omdat die nodige samewerking van die werkgewers in hierdie verband dikwels nie verkry kan word nie, sal die bepalings van die Inentingsregulasies onder die aandag van die betrokke werkgewers in die distrikte waar pokkies voorkom, gebring moet word, en wel op die wyse wat in regulasie 15 van die Inentingsregulasies, afgekondig by Goewermentskennisgewing 2197 van 5 Desember 1930, soos gewysig, bepaal word.

3.7 Maagkoors

Onderstaande Tabel 3.7.1 gee 'n uiteensetting van die getal gevalle van maagkoors wat gedurende die vyf jaar geëindig 31 Desember 1970 in die Republiek aangegee is.

TABEL 3.7.1.

| Jaar | Blankes | Kleur-linge | Asiërs | Bantoes | Totaal |
|-----------|---------|-------------|--------|---------|--------|
| 1966..... | 125 | 190 | 40 | 5 436 | 5 791 |
| 1967..... | 149 | 271 | 30 | 3 391 | 3 841 |
| 1968..... | 74 | 150 | 25 | 3 894 | 4 143 |
| 1969..... | 86 | 95 | 33 | 5 759 | 5 973 |
| 1970..... | 85 | 52 | 52 | 4 082 | 4 251 |

Die gegewens dui aan dat, in vergelyking met die aangiftesyfers vir 1967, daar gedurende 1968 'n afname in die getal gevalle onder Blankes, Kleurlinge en Asiërs was, maar 'n toename van meer as 500 gevalle onder die Bantoes. 'n Ontleding van die syfers vir 1969 word

3.6 Smallpox

From 1956 to 1959 not a single case of smallpox occurred in South Africa. The number of cases notified in the years 1961-1970 is indicated in the table below:

| | |
|------|-----|
| 1961 | 8 |
| 1962 | 103 |
| 1963 | 254 |
| 1964 | 301 |
| 1965 | 191 |
| 1966 | 256 |
| 1967 | 43 |
| 1968 | 81 |
| 1969 | 246 |
| 1970 | 117 |

The distribution of the cases of smallpox (*Variola minor*) notified in 1969 and 1970 is shown in the Table below, by population group and health region:

| Streek/Region | Blankes/Whites | | Kleurlinge/Coloureds | | Asiërs/Asians | | Bantoes/Bantu | | Totaal/Total | |
|--|----------------|------|----------------------|------|---------------|------|---------------|------|--------------|------|
| | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| Suid-Transvaal/Southern Transvaal.. | — | — | — | — | — | — | 202 | 66 | 202 | 66 |
| Noord-Transvaal/Northern Transvaal | — | — | — | — | — | — | 3 | 55 | 3 | 55 |
| Natal..... | — | — | — | — | — | — | 26 | — | 26 | — |
| Oranje-Vrystaat/Orange Free State... | — | — | — | — | — | — | 15 | — | 15 | — |
| Wes- en Oos-Kaapland/Western and Eastern Cape..... | — | — | — | — | — | — | — | — | — | — |
| TOTAAL/TOTAL..... | — | — | — | — | — | — | 246 | 121 | 246 | 121 |

It must be pointed out that it is still absolutely essential for all susceptible persons in the population to be successfully vaccinated against smallpox. Especially in view of the increase in the incidence of smallpox in the Transvaal, it is also of the utmost importance that employers of Non-White labourers and Bantu headmen fulfil their obligations under the Regulations regarding Vaccination and Exemption from Vaccination.

Since often the necessary co-operation in this connection cannot be obtained from employers, the provisions of the Regulations regarding Vaccination and Exemption from Vaccination will have to be brought to the attention of the employers concerned in the districts where smallpox occurs, in the way prescribed in regulation 15 of the Regulations regarding Vaccination published in Government Notice 2197, dated 5 December 1930, as amended.

3.7 Typhoid fever

Table 3.7.1 below details the number of cases of typhoid fever notified in the Republic during the five years ended 31 December 1970:

TABEL 3.7.1.

| Year | Whites | Colour-eds | Asians | Bantu | Total |
|-----------|--------|------------|--------|-------|-------|
| 1966..... | 125 | 190 | 40 | 5 436 | 5 791 |
| 1967..... | 149 | 271 | 30 | 3 391 | 3 841 |
| 1968..... | 74 | 150 | 25 | 3 894 | 4 143 |
| 1969..... | 86 | 95 | 33 | 5 759 | 5 973 |
| 1970..... | 85 | 52 | 32 | 4 082 | 4 251 |

These data show that, in comparison with the notifications for 1967, there was a drop in the number of cases during 1968 among Whites, Coloureds and Asians, but that there was an increase of more than 500 cases among the Bantu. The figures for 1969 are

in Tabel 3.7.2 hieronder gegee, met besonderhede volgens bevolkingsgroep, gezondheidstreek en gebied (stedelik of plattelands):

analysed in Table 3.7.2 below, with particulars arranged according to population group, health region and area (urban or rural):

TABEL/TABLE 3.7.2.

| Gesondheidstreek/Health region | Blankes/Whites | | Kleurlinge/Coloureds | | Asiërs/Asians | | Bantoes/Bantu | | Totaal/Total | | |
|--|----------------|-------------------|----------------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|--------------|
| | Stedelik/Urban | Plattelands/Rural | Stedelik/Urban | Plattelands/Rural | Stedelik/Urban | Plattelands/Rural | Stedelik/Urban | Plattelands/Rural | Stedelik/Urban | Plattelands/Rural | Totaal/Total |
| 1969 | | | | | | | | | | | |
| Wes-Kaapland / Western Cape..... | 5 | — | 25 | 51 | — | — | 43 | 18 | 73 | 69 | 142 |
| Oos-Kaapland/Eastern Cape | 5 | — | 6 | 9 | — | — | 138 | 1 163 | 149 | 1 172 | 1 321 |
| Noord-Transvaal/Northern Transvaal..... | 2 | 2 | — | — | — | — | 34 | 2 107 | 36 | 2 109 | 2 145 |
| Suid-Transvaal / Southern Transvaal..... | 31 | 7 | 2 | 1 | — | — | 125 | 202 | 158 | 210 | 368 |
| Natal..... | 30 | 3 | 7 | 1 | 23 | 10 | 163 | 1 778 | 223 | 1 792 | 2 015 |
| Oranje-Vrystaat / Orange Free State..... | — | 1 | — | — | — | — | 39 | 69 | 39 | 70 | 109 |
| Totaal/Total..... | 73 | 13 | 40 | 62 | 23 | 10 | 542 | 5 337 | 678 | 5 422 | 6 100 |
| 1970 | | | | | | | | | | | |
| Wes-Kaapland / Western Cape..... | 4 | — | 18 | 31 | — | — | 32 | 23 | 54 | 54 | 108 |
| Oos-Kaapland / Eastern Cape..... | 4 | — | 3 | 1 | — | — | 59 | 389 | 66 | 390 | 456 |
| Noord-Transvaal/Northern Transvaal..... | 1 | 11 | 1 | — | 1 | 2 | 16 | 1 591 | 19 | 1 604 | 1 623 |
| Suid-Transvaal / Southern Transvaal..... | 13 | 13 | 10 | — | 1 | — | 137 | 177 | 161 | 190 | 351 |
| Natal..... | 9 | 4 | — | — | 10 | 18 | 79 | 1 539 | 98 | 1 561 | 1 659 |
| Oranje-Vrystaat / Orange Free State..... | 1 | — | — | — | — | — | 33 | 34 | 34 | 34 | 68 |
| Totaal/Total..... | 32 | 28 | 32 | 32 | 12 | 20 | 356 | 3 753 | 432 | 3 833 | 4 265 |

Waar uitbrekings van maagkoors voorgekom het, is ondersoek ter plaatse deur gesondheidspersoneel van hierdie Departement uitgevoer en die nodige voorsorgmaatreëls, met inbegrip van die immunisering van moontlike kontakte met maagkoorsentstof, getref.

3.8 Luistifus

Gedurende 1969 is daar 164 luistifusgevalle by die Departement aangegee en 61 gevalle gedurende 1970. Die meeste van die gevalle het in die endemiese gebiede van die Transkei en Ciskei van Oos-Kaapland voorgekom. Die volgende tabel dui die getal gevalle aan:

| Blankes/Whites | | Bantoes/Bantu | | Kleurlinge/Coloureds | | Asiërs/Asians | | Totaal/Total | |
|----------------|------|---------------|------|----------------------|------|---------------|------|--------------|------|
| 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 | 1969 | 1970 |
| 1 | 1 | 163 | 58 | 0 | 2 | 0 | 0 | 164 | 61 |

AFDELING EKOLOGIEDIENSTE

3.9 Sentrum vir mediese ekologie

3.9.1 Bilharziaprojek.

3.9.1.1 *Slakopnames*.—Vanaf 20 Oktober tot 5 Desember 1969 is 'n intensiewe opname van bilharzia-slakke in Suidoos-Transvaal uitgevoer. Met enkele uitsonderings (gebiede waar opnames reeds uitgevoer is) is alle moontlike slakhouplekke in die distrikte Piet Retief, Wakkerstroom, Volksrust, Ermelo, Carolina, Waterval Boven en Belfast gedurende hierdie opname ondersoek.

Where outbreaks of typhoid fever occurred, inspections *in loco* were carried out by Departmental health staff and the necessary precautionary measures were taken, including the immunisation with typhoid vaccine of all possible contacts.

3.8 Louse-borne typhus

During 1969, 164 cases of louse-borne typhus were reported to the Department, and during 1970, 61 cases. Most of the cases occurred in the endemic areas of the Transkei and Ciskei regions of the Eastern Cape. The following table lists the number of cases:

DIVISION ECOLOGY SERVICES

3.9 Medical ecology centre

3.9.1 Bilharzia project.

3.9.1.1 *Snail surveys*.—An intensive bilharzia snail survey was carried out in the south-eastern Transvaal from 20 October to 5 December 1969. With a few exceptions (areas previously surveyed) all possible snail habitats were examined on this survey in the Piet Retief, Wakkerstroom, Volksrust, Ermelo, Carolina, Waterval Boven and Belfast Districts.

Gedurende September, Oktober en November 1970, is 'n slakopname in die distrikte Pretoria, Cullinan, Bronkhorstspuit en Delmas uitgevoer om die leemtes aan te vul van gebiede waar geen opnames uitgevoer is nie.

3.9.1.2 *Opnames onder mense*.—Gedurende September 1969 is monsters van urine en ontlasting vir ondersoek versamel van Bantoe- en Indiërskoolkinders van 20 skole in Natal, suid van die Tugela tot by die oosgrens van Kaapland. In die loop van die ondersoek is 1 673 urine- en 980 ontlastingmonsters ondersoek. Die algemene voorkomssyfer was 57 persent vir *Schistosoma haematobium* en 5,7 persent vir *Schistosoma mansoni*. Die voorkomssyfer het gewissel van 2 tot 96 persent per skool vir *Schistosoma haematobium* en van 0 tot 58 persent vir *Schistosoma mansoni*.

Gedurende die slakopname in Suidoos-Transvaal in 1969 is urinemonsters van 515 Bantoeskoolkinders in 10 skole geneem in 'n poging om die voorkoms van *Schistosoma haematobium* en die verhouding met die getalle van die intermediêre slakgasheer, *Bulinus (Physopsis) Africana* vas te stel. Ontlastingmonsters is van slegs 142 kinders by drie skole verkry. Die resultaat was soos volg: 'n voorkomssyfer van 42 persent vir *Schistosoma haematobium* en 2 persent vir *Schistosoma mansoni*.

'n Opname van urine, ontlasting en bloed is by 36 Bantoeskole in die Pretoriadistrik onderneem gedurende die slakondersoek in daardie gebied gedurende 1970. Altesaam 3 245 urinemonsters is versamel, waarvan 12,5 persent positief vir *Schistosoma haematobium* was. Die hoogste persentasie positiewe gevalle per skool was 53,6 persent en die laagste was nul. Die resultate van die ontlasting- en bloedtoetse is nog nie volledig nie.

Na bogemelde opname in die Pretoriadistrik, is 'n opname in vyf Bantoeskole in die Bronkhorstspuitdistrik uitgevoer. Urinemonsters van 392 kinders is verkry, waarvan 4,9 persent positief vir *Schistosoma haematobium* was.

3.9.2 Pesnavorsing.

Die probleem van die volhardende voorkoms en patogenese van pes in Suidelike Afrika word steeds bestudeer en die uitbrekings in die Oranje-Vrystaat en Lesotho gedurende 1968 het gedien as 'n waarskuwing dat pes steeds 'n probleem bly ten spyte van toereikender bestryding en behandeling.

Knaagdier- en serologiese opnames is nie gedurende 1969 en 1970 uitgevoer nie, maar knaagdiere is steeds van tyd tot tyd deur die streekgesondheidspersoneel in sekere gebiede ingestuur.

4. AFDELING NASIONALE VOEDING

4.1 Die reorganisasie van die Afdeling Nasionale Voeding is in 1969 begin en in 1970 voltooi.

4.2 Die pos Hoofvoedingsadviseur is afgeskaf en in die plek daarvan is die pos Hoofstaats-Mediese Beampte (Nasionale Voeding) ingestel aan die hoof van 'n nuwe Afdeling wat onder die Direkteur van Gesondheidsvoorligting ressorteer. Die pos is in April 1970 gevul. Die dieetkundiges van die Departement van Kultuursake is gedurende November 1970, oorgeplaas na die Departement van Gesondheid en vorm nou 'n onderafdeling van die Afdeling Nasionale Voeding.

4.3 Dit word as 'n belangrike stap vorentoe beskou, aangesien die dieetkundiges nou as 'n integreerende deel van die gesondheidspan kan funksioneer en ook omdat voorligting in verband met voeding nie meer geïsoleerd van ander aspekte van volksgesondheid aan die publiek hoef verstrekk te word nie.

During September, October and November 1970 a snail survey was conducted in the Pretoria, Cullinan, Bronkhorstspuit, and Delmas Districts to fill in gaps of unsurveyed areas.

3.9.1.2 *Human surveys*.—During September 1969 samples of urine and faeces were collected for examination from Bantu and Indian schoolchildren from 20 schools in Natal south of the Tugela River to the Eastern Cape border. In the course of the study 1 673 urines and 980 faeces were examined. The overall incidence was 57 per cent for *Schistosoma haematobium* and 5,7 per cent for *Schistosoma mansoni*. The incidence varied per school from 2 to 96 per cent for *Schistosoma haematobium* and from 0 to 58 per cent for *Schistosoma mansoni*.

During the 1969 snail survey of the south-eastern Transvaal, urine samples were taken from 515 Bantu school children in 10 schools in an effort to determine the prevalence of *Schistosoma haematobium* and the relationship to the numbers of the snail intermediate host, *Bulinus (Physopsis) Africana*. Faecal samples were collected from only 142 children at three schools. The results are as follows: 42 per cent rate of incidence for *Schistosoma haematobium* and 2 per cent for *Schistosoma mansoni*.

A survey of urine, faeces, and blood was conducted at 36 Bantu schools in the Pretoria District during the snail survey of that area in 1970. In all 3 245 samples of urine were collected, 12,5 per cent of which were positive for *Schistosoma haematobium*. The highest percentage positive per school was 53,6 per cent and the lowest was nil. The results of the faecal and blood tests are not yet complete.

Following the above survey in the Pretoria District, five Bantu schools were surveyed in the Bronkhorstspuit District. Urine samples were collected from 392 children, 4,9 per cent of which were positive for *Schistosoma haematobium*.

3.9.2 Plague research.

The problem of the persistence and pathogenesis of plague in Southern Africa is still being studied, the outbreaks in the Orange Free State and Lesotho in 1968 being a reminder that plague is still a problem despite more adequate means of control and treatment.

Rodent and serological surveys were not conducted during 1969 and 1970, but rodents were still occasionally sent in by the regional health staff in certain areas.

4. DIVISION OF NATIONAL NUTRITION

4.1 The reorganisation of the Division of National Nutrition was commenced in 1969 and completed in 1970.

4.2 The post of Chief Nutrition Adviser was abolished and in its place a post was created of Chief Government Medical Officer (National Nutrition) at the head of a new division falling under the Director of Health Education. The post was filled in April 1970. During November 1970 the dieticians of the Department of Cultural Affairs were transferred to the Department of Health to form a subdivision of the Division of National Nutrition.

4.3 This is considered an important step forward since the dieticians can now function as an integral part of the health team and nutrition need no longer be taught to the public in isolation from other aspects of public health.

4.4 As gevolg hiervan kan die Departement se voedingsvoorligtingsprogram aansienlik uitgebrei word sodat alle bevolkingsgroepe in die Republiek daarby kan baat.

4.5 Op 'n langtermyngrondslag word voedingsvoorligting as een van die belangrikste funksies van die Afdeling beskou.

4.6 Die voorkoming van proteïen-kaloriewanvoeding en pellagra, wat steeds die twee algemeenste gebrek-sindrome in die Republiek is, word sterk beklemtoon.

4.7 As 'n eerste stap op 'n kortermyngrondslag is die gesubsidieerde afgeroomde-melkpoeierskema vir voorskoolse kinders uitgebrei. Meer fondse is beskikbaar gestel en, benewens plaaslike owerhede en Bantoe-owerhede, kan sendinghospitale in die Bantoe-tuislande sedert die laaste helfte van 1970 aan die skema deelneem.

4.8 Verder word 'n rekenoutomaatprogram opgestel om die Departement in staat te stel om die behoefte aan die skema beter te bepaal en die resultate wat behaal word, beter te evalueer.

4.9 Die feit dat kindergesondheidsklinieke nou vir alle kinders tot skoolouderdom voorsiening maak en nie net vir babas en heel klein kinders nie, sal verder help om beter gesondheid- en voedingsorg vir hierdie kwesbare groep te verseker.

4.10 Die Afdeling bly steeds verantwoordelik vir die formulering en uitvoering van die ander aspekte van die Departement se voedingsbeleid om die bevolking se voedingspeil te verbeter.

4.11 Die Afdeling voorsien ook Staatsdepartemente van tegniese advies in verband met voedingsaangeleenthede en handhaaf tegniese skakeling met ander betrokke organisasies sowel hier as in die buiteland.

IV. TAK MEDIESE DIENSTE

1. TUBERKULOSE (1969)

1.1 Tuberkulose is steeds 'n belangrike openbare gesondheidsprobleem, ten spyte van cindelose pogings om hierdie siekte te bestry.

1.2 Totale aangiftes, asook aangiftes vir alle bevolkingsgroepe, het verminder in vergelyking met die getalle vir 1968.

1.3 Hospitaalakkommodasie: Op 31 Desember 1969 was daar 25 078 beddens vir tuberkulose-pasiënte. Hierdie getal beddens blyk voldoende te wees, mits hospitale gereeld besoek word om 'n wisseling van pasiënte te handhaaf en om die pasiënte wat nie aan tuberkulose ly nie, te ontslaan.

1.4 Die Tuberkulienvoltoets word nou as 'n epidemiologiese eerder as 'n diagnostiese maatreël erken hoewel aanvaar word dat 'n klein kindjie wat 'n skerp reaksie toon, ongetwyfeld behandeling vereis.

Deur middel van tuberkulientoetsprogramme in skole kan B.C.G.-entstof aan nie-besmette individue toegedien word en beskermende chemoterapie met isoniasied onder toesig op gesonde besmette individue toegepas word.

1.5 Gesondheidsvoorligting is steeds aangemoedig as 'n noodsaaklike deel van die tuberkulosebestrydingsprogram. Die hoofdoelwit is om pasiënte te oortuig van die noodsaaklikheid dat behandeling en toesig voortgesit word solank as wat dit nodig geag word.

2. TUBERKULOSE (1970)

2.1 Tuberkulose word steeds erken as een van die vernaamste openbare gesondheidsprobleme, maar dit word nie meer geïsoleer van die probleem in sy geheel gesien nie. Daar word erken dat spesifieke maatreëls teen tuberkulose nie kan slaag sonder bykomende aandag aan alle ander faktore, veral voeding, nie.

4.4 As a result the Department's nutrition education programme can be considerably expanded to serve all population groups of the Republic.

4.5 On a long term basis, nutrition education is considered to be one of the most important functions of the Division.

4.6 Great emphasis is placed on the prevention of protein-calorie malnutrition and pellagra, which are still the two most common deficiency syndromes in the Republic.

4.7 As a first step, on a short-term basis, the subsidised skim milk powder scheme for pre-school children has been expanded. More funds were made available and, since the latter half of 1970, in addition to local authorities and Bantu authorities, mission hospitals in the Bantu Homelands have been able to participate in the scheme. In addition, a computer programme is being drawn up to enable the Department better to assess the need for the scheme and evaluate the results obtained.

4.8 Furthermore a computer programme is being compiled to enable the Department to determine the requirements of the scheme and to evaluate the results obtained more satisfactorily.

4.9 The fact that child health clinics can now cater for all children up to school age and not only for infants and toddlers will further ensure better health and nutritional care for this vulnerable group.

4.10 The Division continues to be responsible for the formulation and implementation of the other aspects of the Department's nutrition policy for the improvement of the nutritional standard of the population.

4.11 The Division also gives Government departments technical advice on nutritional matters, and maintains technical liaison with other organisations concerned, both here and abroad.

IV MEDICAL SERVICES BRANCH

1. TUBERCULOSIS (1969)

1.1 Tuberculosis is still a major public health problem, in spite of unremitting efforts to control the disease.

1.2 Total notifications, as well as notifications for all population groups, have decreased in comparison with the figures for 1968.

1.3 Hospital accommodation: On 31 December 1969 there were 25 078 beds for tuberculosis patients. This number of beds appears to be adequate, provided hospitals are regularly visited to maintain a turnover of patients and to discharge those who are not suffering from tuberculosis.

1.4 Tuberculin skin testing is becoming recognised as an epidemiological rather than a diagnostic measure, although it is accepted that a small child with an acute reaction is unquestionably in need of treatment. Tuberculin-testing programmes in schools enable B.C.G. vaccine to be administered to uninfected individuals and protective chemotherapy with isoniazid to be given under supervision to healthy infected individuals.

1.5 Health education continued to be encouraged as a necessary part of the tuberculosis control programme, the main objective being to convince patients of the need to remain under treatment and supervision for as long as considered necessary.

2. TUBERCULOSIS (1970)

2.1 Tuberculosis continues to be recognised as one of the major public health problems, but is no longer seen in isolation from the total problem. It is recognised that specific anti-tuberculosis measures cannot succeed without concomitant attention to all other factors, and particularly nutrition.

2.2 In vergelyking met die vorige jaar was daar weer eens 'n afname in die totale getal aangiftes en die aangiftes vir elke bevolkingsgroep. Hierdie getalle moet met versigtigheid aanvaar word, aangesien dit bekend is dat baie nie-tuberkulosesiektes in die totale ingesluit is. 'n Hersiene aangiftestelsel word tans oorweeg, waardeur noukeuriger gegewens beskikbaar sal word. Die kriteria vir sterftes aan tuberkulose sal ook bepaal word ten einde in die toekoms betroubare sterftestatistieke te verkry.

2.3 Hospitaalakkommodasie: Op 31 Desember 1970 was daar 25 078 beddens vir tuberkulosepasiënte. Die klem verskuif deesdae weg van hospitaalbehandeling vir tuberkulose, aangesien die moderne siening is dat inrigtingsorg slegs nodig is vir pasiënte wat siek voel en graag in 'n hospitaal opgeneem wil word. Radiologiese en speekselstaat is van weinig belang wanneer besluit moet word of hospitalisasie nodig is, mits voldoende terapie onder behoorlike toesig by die werk of tuis beskikbaar is.

Streng afsondering word nie meer as noodsaaklik vir pasiënte onder moderne chemoterapeutiese behandeling beskou nie. Daar word erken dat die gevaar van besmetting deur tuberkulosepasiënte voor diagnose bestaan en nie nadat met behandeling begin is nie.

2.4 Voorkoming en beskerming: Die belangrikheid van voorkomende en beskermende maatreëls teen tuberkulose word steeds sterker beklemtoon. Benewens die R80 000 wat die afgelope jare gereeld vir B.C.G.-entstof toegewys word, is nog R30 000 beskikbaar gestel vir gebruik in die Bantoetuislande om die uitbreiding van die inentingsprogram gedurende 1970, te dek.

Die gebruik van isoniasiedbeskermende terapie vir gesonde besmette individue het toegeneem saam met die toenemende gebruik van B.C.G.-entstof, as deel van 'n program waarvan die einddoel is om gereelde jaarlikse tuberkulentoetsopnames by alle Bantoeskole uit te voer.

2.5 Gesondheidsvoorligting (sien aparte verslag) word nie langer beskou as slegs deel van die tuberkulosebestrydingsprogram nie, maar is nou 'n aparte afdeling wat tuberkulosebestryding in sy werksaamhede insluit.

V. TAK GESONDHEIDS-LABORATORIUMDIENSTE

1. TOTSTANDKOMING

1.1 Die Tak Gesondheidslaboratoriumdienste het gedurende 1970 tot stand gekom. Die Direkteur wat aangestel is, is belas met die beplanning en beheer van 'n omvattende en doeltreffende gesondheidslaboratoriumdiens in die Republiek.

1.2 Die diens is in twee afdelings verdeel t.w.—

- (i) die patologiese laboratoriumdiens;
- (ii) die gesondheidskeikundige laboratoriumdiens.

1.3 As Direkteur is Prof. L. S. Smith en as Hoof van Patologiese Dienste en Gesondheidskeikundige Dienste is, onderskeidelik, Prof. T. G. Schwär en mnr. J. W. de Graad aangestel.

2. DIE PATOLOGIESE LABORATORIUMDIENSTE

2.1 Die volgende dienste word in die verskillende laboratoria gelewer:

- (i) 'n Diens vir die diagnose en bestryding van aansteeklike en oordraagbare siektes asook vir die ondersoek ter voorkoming van sekere patologiese toestande.
- (ii) 'n Kliniese patologiese diens word gelewer aan die Weermag, die S.A. Polisie en ander Staatsdepartemente.

2.2 Once again, there has been a decrease in the total number of notifications, and the notifications for each population group, compared with the previous year. Notification figures should, however, be accepted with caution, since it is known that many non-tuberculosis diseases are included in the totals. A revised system of notification which will provide more accurate data is at present being considered. Similarly, the criteria for death from tuberculosis will be defined in an attempt to obtain reliable mortality statistics in future.

2.3 Hospital accommodation: On 31 December 1970 there were 25 078 beds for tuberculosis patients. Emphasis is shifting away from hospital treatment for tuberculosis, the modern view being that institutional care is necessary only for patients who feel ill and wish to be admitted to hospital. Radiological and sputum status are of little importance in deciding whether hospitalisation is necessary, provided properly supervised and adequate therapy is available at work or at home. Strict isolation is no longer considered essential for patients under modern chemotherapy. It is recognised that the danger of infection from tuberculosis patients exists before diagnosis, not after treatment is commenced.

2.4 Prevention and protection: Increasing emphasis is being placed on preventive and protective measures against tuberculosis. In addition to the R80 000 regularly allocated for the purchase of B.C.G. vaccine in past years, a further R30 000 was made available for use in Bantu Homelands to cover the expansion of the vaccination programme during 1970.

The use of isoniazid protective therapy for healthy infected individuals has increased simultaneously with the increasing use of B.C.G. vaccine as part of a programme whose ultimate objective is regular annual tuberculin-testing surveys of all Bantu schools.

2.5 Health Education is no longer regarded simply as part of the tuberculosis control programme, but now forms a separate division which includes tuberculosis control in its activities. (See separate report.)

V HEALTH LABORATORY SERVICES BRANCH

1. ESTABLISHMENT

1.1 The Health Laboratory Services Branch was established in 1970. The Director who was appointed, is responsible for the planning and control of a comprehensive and efficient health laboratory service in the Republic.

1.2 The service has been divided into two divisions, namely—

- (i) the pathological laboratory service;
- (ii) the health chemical service.

1.3 Prof. L. S. Smith was appointed as Director and Prof. T. G. Schwär and Mr J. W. de Graad were appointed as Head of Pathological Services and Health Chemical Services, respectively.

2. THE PATHOLOGICAL LABORATORY SERVICE

2.1 The following services are rendered in the respective laboratories:

- (i) A service for the diagnosis and combating of infectious and communicable diseases as well as for the examination for the prevention of certain pathological conditions.
- (ii) A clinical pathological service is rendered to the Defence Force, the S.A. Police and other Government Departments.

(iii) 'n Gespesialiseerde diens vir parasitologiese ondersoeke (by die Siegfried Annecke Instituut, Tzaneen) en ekologiese studies (by die Staatsmediese Ekologiese Laboratorium, Johannesburg).

2.2 'n Regsgeneeskundige diens word in die groter sentra gelewer en sluit 'n raadplegende diens in wat die hele Republiek insluit.

2.3 Die produksie van entstowwe teen pokke en hondsdolheid word voortgesit. Vriesgedroogde entstof teen pokke word nou vervaardig en uitgereik. Entstof teen hondsdolheid word nou vervaardig in suigeling rotbreine.

2.4 'n Omvattende, kliniese patologiese diens word by die groter hospitale in die Bantoetuislande gelewer.

3. GESONDHEIDSKEIKUNDIGE LABORATORIUMDIENS

3.1 Die diens wat in die laboratoria te Kaapstad, Durban en Pretoria gelewer word, sluit die volgende in:

(i) Toksikologiese ondersoeke vir regsgeneeskundige doeleindes.

(ii) Ondersoek van voedingsmiddels en medisyne.

(iii) Bepaling van insekdoderreste, veral in vrugte.

4. STATISTIEKE

'n Weergawe van die omvang van die werk word in statistiese tabelle 8 (a), 8 (b), 8 (c), 8 (d), 9 (a) en 9 (b) van hierdie verslag weerspieël.

Genl.-maj. E. C. RAYMOND, Sekretaris van Gesondheid.

(iii) A specialised service for parasitological investigations (at the Siegfried Annecke Institute, Tzaneen) and ecological studies (at State Medical Ecology Laboratory, Johannesburg).

2.2 A Medical Legal Service is rendered in the larger centres and includes a consultative service which covers the whole Republic.

2.3 Production of smallpox and rabies vaccines is being continued. Freeze dried smallpox vaccine is now being manufactured and issued. Rabies vaccine is now being manufactured in suckling rat brains.

2.4 A comprehensive clinical pathological service is being rendered at the larger hospitals in the Bantu Homelands.

3. HEALTH CHEMICAL LABORATORY SERVICE

3.1 The services rendered at the laboratories at Cape Town, Durban and Pretoria include the following:

(i) Toxicological investigations for medical legal purposes.

(ii) Examination of foodstuffs and medicines.

(iii) Determination of insecticide residue, especially in fruit.

4. STATISTICS

4.1 A reproduction of the volume of the work is shown in statistic tables 8 (a), 8 (b), 8 (c), 8 (d), 9 (a) and 9 (b) of this report.

Maj.-Gen. E. C. RAYMOND, Secretary for Health.

LYS VAN STATISTIESE TABELLE

1. Geregistreeerde geboortes, geklassifiseer volgens provinsie en geslag.
2. Geregistreeerde sterfgevälle, geklassifiseer volgens provinsie en geslag.
3. Geraamde bevolking volgens ras 30 Junie 1969-70.
4. Aangifte van siektes en geregistreeerde sterfgevälle, 1969-70.
5. Malaria :
 - (a) Hutte met nawerkende insekdodende middels behandel, 1969-70.
 - (b) Aantal positiewe smere ondersoek, 1969-70.
6. Tuberkulose :
 - (a) Verspreiding van gevälle en sterfgevälle volgens ras en ouderdom.
7. Verpleeg-, kraam- en kindersorgdienste :
 - (a) Verpleeginrigtings geregistreeer, aantal beddens beskikbaar en personeel van verpleeginrigtings op 31 Desember 1969-70.
8. Laboratoriums en biologiese beheer :
 - (a) Ontledings en ondersoeke.
 - (b) Aard van ondersoeke uitgevoer.
 - (c) Werk verrig by Staatsentsofinstituut, Pinelands, Kaapstad.
 - (d) Limf in die Republiek gratis uitgereik.
- (9) Die Wet op Geneeshere, Tandartse en Aptekers, Wet 13 van 1928 :
 - (a) Lisensies en permitte uitgereik kragtens die regulasies op terapeutiese stowwe.
 - (b) Ondersoeke uitgevoer kragtens die Regulasies op Terapeutiese Stowwe.
 - (c) Narkotiese middels ingevoer in die Republiek van Suid-Afrika.

LIST OF STATISTICAL TABLES

1. Registered births, classified by province and sex.
2. Registered deaths, classified by province and sex.
3. Estimated population by race, 30 June 1969-70.
4. Notification of diseases and registered deaths, 1969-70.
5. Malaria :
 - (a) Huts treated with residual insecticides, 1969-70.
 - (b) Number of positive smears examined, 1969-70.
6. Tuberculosis :
 - (a) Distribution of cases and deaths, by race and age.
7. Nursing, Maternity and Child Welfare Services :
 - (a) Nursing homes registered, bed accommodation available and staff of nursing homes at 31 Desember 1969-70.
8. Laboratories and biological control :
 - (a) Analyses and examinations.
 - (b) Nature of examinations carried out.
 - (c) Work carried out at Government Vaccine Institute, Pinelands, Cape Town.
 - (d) Lymph issued free of charge in the Republic.
9. Medical, Dental and Pharmacy Act, Act No. 13 of 1928.
 - (a) Licences and permits issued under the Therapeutic Substances Regulations.
 - (b) Examinations carried out under the Therapeutic Substances Regulations.
 - (c) Narcotic drugs imported into the Republic of South Africa.

Tabel 1.—GEBORTES GEREGISTREER VOLGENS PROVINSIE EN GESLAG, 1969 EN 1970

Verpligte registrasie van Bantoegeboortes is uitgebrei tot die plattelandse gebiede vanaf 1 Julie 1952, maar dit sal nog verskeie jare duur voordat registrasie as volledig beskou kan word. Die volgende tabel gee die aantal geboortes van Blankes, Asiërs en Kleurlinge wat gedurende die afgelope twee jaar geregistreer is, ingedeel volgens provinsie en geslag, en dui ook die geboortesyfer per duisend van die bevolking aan.

Table 1.—BIRTHS REGISTERED BY PROVINCE AND SEX, 1969 AND 1970

The compulsory registration of Bantu births was extended to the rural areas as from 1 July 1952, but it will be several years before registration can be regarded as complete. The following table shows the number of births of Whites, Asians and Coloureds registered during the past two years, according to province and sex, and also indicates the birth rate per thousand of the population.

| Jaar Year | Kaapprovinsie Cape Province* | | Natal* | | Transvaal* | | Oranje-Vrystaat Orange Free State* | | Republiek van Suid-Afrika Republic of South Africa | | Totaal Total | Geboortesyfer per 1 000 van die bevolking Birth rate per 1 000 of the population |
|--------------|---------------------------------|-------------------|----------------|-------------------|----------------|-------------------|---------------------------------------|-------------------|---|-------------------|-----------------|--|
| | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | | |

BLANKES—WHITES

| | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|--------|------|
| 1969..... | — | — | — | — | — | — | — | — | — | — | 87 613 | 23,5 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | 90 186 | 24,0 |

ASIËRS—ASIANS

| | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|--------|------|
| 1969..... | — | — | — | — | — | — | — | — | — | — | 21 435 | 36,3 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | 21 394 | 34,3 |

KLEURLINGE—COLOURED

| | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|--------|------|
| 1969..... | — | — | — | — | — | — | — | — | — | — | 78 604 | 40,1 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | 76 462 | 37,8 |

Syfers op provinsiale basis nog nie beskikbaar nie.
Figures on provincial basis not yet available.

Tabel 2. — STERFGEVALLE GEREGISTREER VOLGENS PROVINSIE EN GESLAG, 1969 en 1970

Net soos die registrasie van Bantoegeboortes in die platteland verpligtend gemaak is, so ook is die verpligte registrasie van Bantosterfgevalle vanaf 1 Julie 1952 tot die platteland uitgebrei, maar om verskeie redes is betroubare gegewens nog nie beskikbaar nie. Die volgende is 'n tabel van geregistreeerde sterfgevalle van Blankes, Asiërs en Kleurlinge in die onderskeie provinsies, volgens geslag, met aanduiding van die sterfesyfer per duisend van die bevolking.

Table 2.—DEATHS REGISTERED BY PROVINCE AND SEX, 1969 AND 1970

In the same way as the registration of Bantu births was made compulsory in rural areas, so the compulsory registration of Bantu deaths was extended to these areas as from 1 July 1952, but for various reasons reliable figures are not yet available. The following is a table indicating registered deaths of Whites, Asians and Coloureds in the various provinces, according to sex, and showing also the death rate per thousand of the population.

| Jaar Year | Kaapprovinsie Cape Province* | | Natal* | | Transvaal* | | Oranje-Vrystaat Orange Free State* | | Republiek van Suid-Afrika Republic of South Africa | | | |
|--------------|---------------------------------|-------------------|----------------|-------------------|----------------|-------------------|---------------------------------------|-------------------|---|-------------------|-----------------|--|
| | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Manlik Male | Vroulik Female | Totaal Total | Sterfesyfer per 1 000 van die bevolking Death rate per 1 000 of the population |

BLANKES—WHITES

| | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|--------|-----|
| 1969..... | — | — | — | — | — | — | — | — | — | — | — | 32 040 | 8,6 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | — | 34 060 | 9,1 |

ASIËRS—ASIANS

| | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|-------|-----|
| 1969..... | — | — | — | — | — | — | — | — | — | — | — | 4 192 | 7,1 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | — | 4 398 | 7,0 |

KLEURLINGE—COLOURED

| | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|--------|------|
| 1969..... | — | — | — | — | — | — | — | — | — | — | — | 28 032 | 14,3 |
| 1970..... | — | — | — | — | — | — | — | — | — | — | — | 29 338 | 14,5 |

Syfers op provinsiale basis nog nie beskikbaar nie.
Figures on provincial basis not yet available.

Tabel 3.—BERAAMDE BEVOLKING VOLGENS RAS SOOS OP 30 JUNIE
1969 EN 1970

Table 3.—ESTIMATED POPULATION BY RACE AS AT 30 JUNE 1969
AND 1970

| Provinsie Province | Blanks/Whites | | | Bantoes/Bantu | | | Asiërs/Asians | | | Kleurlinge/Coloureds | | |
|------------------------------------|----------------|-------------------|-----------------|----------------|-------------------|-----------------|----------------|-------------------|-----------------|----------------------|-------------------|-----------------|
| | Manlik Male | Vroulik Female | Totaal Total | Manlik Male | Vroulik Female | Totaal Total | Manlik Male | Vroulik Female | Totaal Total | Manlik Male | Vroulik Female | Totaal Total |
| | Kaap/Cape* | — | — | — | — | — | — | — | — | — | — | — |
| Natal* | — | — | — | — | — | — | — | — | — | — | — | — |
| Transvaal* | — | — | — | — | — | — | — | — | — | — | — | — |
| Oranje-Vrystaat/Orange Free State* | — | — | — | — | — | — | — | — | — | — | — | — |
| Republiek/Republic 1969..... | 1 861 000 | 1 867 000 | 3 728 000 | 6 728 000 | 6 612 000 | 13 340 000 | 297 000 | 294 000 | 591 000 | 968 000 | 991 000 | 1 959 000 |
| Republiek/Republic 1970..... | 1 867 529 | 1 883 187 | 3 750 716 | 7 389 663 | 7 667 896 | 15 057 559 | 309 424 | 310 998 | 620 422 | 993 649 | 1 024 884 | 2 018 533 |

* Syfers nog nie op provinsiale basis beskikbaar nie.

* Figures on provincial basis not yet available.

Tabel 5 (a).—MALARIA: HUTTE MET NAWERKENDE INSEKDODENDE MIDDELS BEHANDEL, 1 JANUARIE TOT 31 DESEMBER 1969

| Tydperk—Period | Transvaal | Natal | Kaap—Cape |
|----------------------|-----------|--------|-----------|
| 1/1/69–31/12/69..... | 266 867 | 36 542 | — |

Table 5 (a).—MALARIA: HUTS TREATED WITH RESIDUAL INSECTICIDES, 1 JANUARY TO 31 DECEMBER 1969

Tabel 5 (b).—AANTAL POSITIEWE SMERE WAT ONDERSOEK IS, 1 JANUARIE TOT 31 DESEMBER 1969

| Tydperk—Period | Kaap—Cape | Transvaal | Natal | Totaal—Total |
|----------------------|-----------|-----------|-------|--------------|
| 1/1/69–31/12/69..... | — | 422 | 5 | 527 |

Table 5 (b).—NUMBER OF POSITIVE SMEARS EXAMINED, 1 JANUARY TO 31 DECEMBER, 1969

Tabel 5 (a).—MALARIA: HUTTE MET NAWERKENDE INSEKDODENDE MIDDELS BEHANDEL, 1 JANUARIE TOT 31 DESEMBER 1970

| Tydperk—Period | Transvaal | Natal | Kaap—Cape |
|----------------------|-----------|--------|-----------|
| 1/1/70–31/12/70..... | 342 685 | 53 290 | — |

Table 5 (a).—MALARIA: HUTS TREATED WITH RESIDUAL INSECTICIDES, 1 JANUARY TO 31 DECEMBER 1970

Tabel 5 (b).—AANTAL POSITIEWE SMERE WAT ONDERSOEK IS, 1 JANUARIE TOT 31 DESEMBER 1970

| Tydperk—Period | Kaap—Cape | Transvaal | Natal | Totaal—Total |
|----------------------|-----------|-----------|-------|--------------|
| 1/1/70–31/12/70..... | — | 264 | 1 | 265 |

Table 5 (b).—NUMBER OF POSITIVE SMEARS EXAMINED, 1 JANUARY TO 31 DECEMBER 1970

Table 6.—TUBERCULOSIS: DISTRIBUTION OF CASES AND DEATHS,
BY RACE AND AGE, 1 JANUARY TO 31 DECEMBER 1969

Table 6.—TUBERKULOSE: VERSPREIDING VAN GEVALLE EN STERF-
GEVALLE, VOLGENS RAS EN OUDERDOM, 1 JANUARIE TOT 31
DESEMBER 1969

| | 0-4 Jaar 0-4 Years | | 5-9 Jaar 5-9 Years | | 10-14 Jaar 10-14 Years | | 15-19 Jaar 15-19 Years | | 20-24 Jaar 20-24 Years | | 25-29 Jaar 25-29 Years | | 30-39 Jaar 30-39 Years | | 40-49 Jaar 40-49 Years | | 50 + Jaar 50 + Years | | Ongespesifiseer Unspecified | | Totaal Total | |
|----------------------|-----------------------|----------------------------------|-----------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|-------------------------|----------------------------------|--------------------------------|----------------------------------|------------------|----------------------------------|
| | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † |
| BLANKES/WHITES | | | | | | | | | | | | | | | | | | | | | | |
| | 106 | — | 57 | — | 30 | — | 33 | — | 47 | — | 46 | — | 88 | — | 137 | — | 264 | — | 28 | — | 836 | — |
| BANTOES/BANTU | | | | | | | | | | | | | | | | | | | | | | |
| | 12 036 | — | 5 803 | — | 3 059 | — | 2 907 | — | 3 732 | — | 4 184 | — | 7 979 | — | 7 561 | — | 11 141 | — | 1 568 | — | 59 970 | — |
| KLEURLINGE/COLOUREDS | | | | | | | | | | | | | | | | | | | | | | |
| | 1 765 | — | 799 | — | 369 | — | 485 | — | 579 | — | 539 | — | 863 | — | 640 | — | 903 | — | 123 | — | 7 065 | — |
| ASIERS/ASIANS | | | | | | | | | | | | | | | | | | | | | | |
| | 137 | — | 93 | — | 47 | — | 95 | — | 127 | — | 113 | — | 133 | — | 96 | — | 132 | — | 3 | — | 976 | — |

† Sterftesyfers nog nie beskikbaar nie./Mortality figures not yet available.

Table 6.—TUBERCULOSE: VERSPREIDING VAN GEVALLE EN STERF-GEVALLE, VOLGENS RAS EN OUDERDOM, 1 JANUARIE TOT 31 DESEMBER 1970

Table 6.—TUBERCULOSIS: DISTRIBUTION OF CASES AND DEATHS, BY RACE AND AGE, 1 JANUARY TO 31 DECEMBER 1970

| | 0-4 Jaar 0-4 Years | | 5-9 Jaar 5-9 Years | | 10-14 Jaar 10-14 Years | | 15-19 Jaar 15-19 Years | | 20-24 Jaar 20-24 Years | | 25-29 Jaar 25-29 Years | | 30-39 Jaar 30-39 Years | | 40-49 Jaar 40-49 Years | | 50 + Jaar 50 + Years | | Ongespesifiseer Unspecified | | Totaal Total | |
|----------------------|-----------------------|----------------------------------|-----------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|-------------------------|----------------------------------|--------------------------------|----------------------------------|------------------|----------------------------------|
| | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † | Gevalle Cases | Sterf- gevalle Deaths † |
| BLANKES/WHITES | | | | | | | | | | | | | | | | | | | | | | |
| | 87 | — | 43 | — | 19 | — | 28 | — | 41 | — | 56 | — | 97 | — | 119 | — | 292 | — | 42 | — | 824 | — |
| BANTOES/BANTU | | | | | | | | | | | | | | | | | | | | | | |
| | 10 569 | — | 5 290 | — | 2 853 | — | 2 794 | — | 3 628 | — | 3 855 | — | 7 727 | — | 7 240 | — | 10 030 | — | 1 412 | — | 55 398 | — |
| KLEURLINGE/COLOUREDS | | | | | | | | | | | | | | | | | | | | | | |
| | 1 316 | — | 697 | — | 310 | — | 481 | — | 562 | — | 505 | — | 935 | — | 750 | — | 909 | — | 153 | — | 6 618 | — |
| ASIËRS/ASIANS | | | | | | | | | | | | | | | | | | | | | | |
| | 121 | — | 83 | — | 40 | — | 90 | — | 134 | — | 100 | — | 148 | — | 99 | — | 134 | — | 8 | — | 957 | — |

†Sterfiesfers nog nie beskikbaar nie./Mortality figures not yet available.

Tabel 7 (a).—VERPLEEGINRIGTINGS BY DIE DEPARTEMENT GEREGISTREER EN AANTAL BEDDENS BESKIKBAAR OP 31 DESEMBER 1969—1970

Table 7 (a).—NURSING HOMES REGISTERED WITH THE DEPARTMENT AND BED ACCOMMODATION AVAILABLE AS AT 31 DECEMBER 1969—1970

| Besonderhede/Particulars | Transvaal† | | Oranje-Vrystaat Orange Free State | | | |
|--|-------------------|---------------------------|--------------------------------------|------|---------------------------|------|
| | Blankes Whites | Nie-Blankes Non-Whites | Blankes Whites | | Nie-Blankes Non-Whites | |
| | | | 1969 | 1970 | 1969 | 1970 |
| Verpleeginrigtings by die Departement geregistreer/Nursing homes registered with the Department..... | — | — | 5 | 5 | 2 | 2 |
| Aantal beddens beskikbaar/Bed accommodation available: | | | | | | |
| Beddens/Beds..... | — | — | 30 | 30 | 345 | 395 |
| *Wiegies/Cots..... | — | — | 15 | 15 | 29 | 29 |

*Vir pasgebore babas/For new-born babies

†Alle verpleeginrigtings in Transvaal is deur die Provinsie oorgeneem/All nursing homes in the Transvaal have been taken over by the Province

Tabel 8(a).—PATOLOGIELABORATORIUMS: ONTLEDINGS EN ONDER-
SOEKE, JAAR GEËINDIG 31 DESEMBER 1969

Table 8(a).—PATHOLOGICAL LABORATORIES: ANALYSES AND EX-
AMINATIONS, YEAR ENDED 31 DECEMBER 1969

| Besonderhede/Particulars | Staatslaboratoriums Government laboratories | | | Suid-Afrikaanse Instituut vir Mediese Navorsing South African Institute for Medical Research† | | | |
|--|--|---------|--------------|--|--------------|----------|---|
| | Kaapstad Cape Town | Durban | Johannesburg | Port Elizabeth | Bloemfontein | Windhoek | |
| | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | |
| — | 13 564 | 680 | 49 180 | 20 332 | 63 298 | 15 952 | |
| — | — | 5 | — | — | — | — | |
| — | — | — | — | — | — | — | |
| — | 31 480 | 46 186 | 85 366 | 22 259 | 34 700 | — | |
| — | 8 151 | 5 759 | 150 448 | 29 082 | 24 897 | 5 763 | |
| — | — | 2 255 | 115 672 | — | 10 989 | — | |
| — | — | 271 | — | — | — | — | |
| — | — | 83 | — | — | — | — | |
| — | 991 | 294 | — | — | — | — | |
| — | — | 295 | 136 314 | 42 050 | 41 049 | 30 007 | |
| TOTALE/TOTALS..... | 54 186 | 55 828 | 536 980 | 113 723 | 174 933 | 51 722 | |
| (b) Algemene hospitale (provinsiaal)/General hospitals (provincial)..... | 12 208 | 88 684 | 128 853 | 55 644 | 35 790 | — | |
| (c) Plaaslike bestuur/Local authorities..... | 97 015 | 70 585 | 1 334 991 | 514 330 | 164 154 | — | |
| (d) Geneeshere en lede van die publiek/Medical practitioners and members of the public..... | 11 163 | 6 578 | 1 707 069 | 370 189 | 242 867 | — | |
| (e) Ander regerings en ander administrasies/Other governments and other administrations..... | — | — | — | — | — | — | |
| (f) Ander/Other..... | 9 314 | 48 184 | 232 804 | — | 34 670 | — | |
| TOTALE/TOTALS..... | 129 700 | 214 031 | 3 403 717 | 940 163 | 477 481 | — | |
| Fabrikate en uitreikings/Manufactures and issues: | — | — | 216 | 26 | — | — | |
| Outogene vaksiene/Autogenous vaccines.....ml | — | — | — | — | — | — | |
| Bakteriese vaksiene/Bacterial vaccines.....ml | 81 900 | — | — | — | — | — | |
| Vakstien teen hondsdolheid/Anti-rabies vaccine.....ml | — | — | 7 003 | 3 400 | — | — | |
| Tuberkulienverduinnings/Tuberculin dilutions.....ml | — | — | 122 266 | — | — | — | |
| Serums (verskillende) bakteriese filtrate/Sera (various) bacterial filtrates.....ml | — | — | 223 463 | — | — | — | |
| Serums (ampulle)/Sera (ampules).....ml | — | — | — | — | — | — | |
| Chaulmoograoliepreparate/Chaulmoogra oil preparations.....ml | — | — | — | — | — | — | |
| Limf/Lymph.....Liter/Litres | 6 175 527 | — | 2 087 523 | 11 400 | 10 146 | — | |
| Kuikenvlieslimf (voorhande)/Chick membrane lymph (on hand).....Dosisse/Doses | — | — | — | — | — | — | |
| Ander dossisse (sluk)/Other (oral) doses.....Bottels/Bottles | — | — | 3 866 278 | — | — | — | |
| Melkkulture/Milk cultures.....Bottels/Bottles | — | — | — | — | — | — | |
| Human blood processed.....ml | — | — | — | — | — | — | |
| Nat bottels vir volbloed voorberei/Wet bottles prepared for whole blood.....Bottels/Bottles | — | — | — | — | — | — | |
| Serum geskei van bloed/Serum separated from blood.....Liter/Litres | — | — | — | — | — | — | |
| Ander vaksiene/Other vaccines.....ml | — | — | — | — | — | — | |
| Griepvaksien/Influenza vaccine.....ml | — | — | — | — | — | — | |

† Eenhede/Units.

Tabel 8(a).—PATOLOGIELABORATORIUMS: ONTLEDINGS EN ONDER-SOEKE, JAAR GEËINDIG 31 DESEMBER 1970

Table 8(a).—PATHOLOGICAL LABORATORIES: ANALYSES AND EXAMINATIONS, YEAR ENDED 31 DECEMBER 1970

| Besonderhede/Particulars | Staatslaboratoriums Government laboratories | | | Suid-Afrikaanse Instituut vir Mediese Navorsing South African Institute for Medical Research† | | | |
|--|--|---------|---------|--|----------------|--------------|----------|
| | Durban | | | Johannesburg | Port Elizabeth | Bloemfontein | Windhoek |
| | Kaapstad Cape Town | Durban | | | | | |
| Monsters ondersoek vir/Specimens examined for: | | | | | | | |
| (a) Staatsdepartemente/Government Departments. | | | | | | | |
| Landbou-tegniese Dienste/Agricultural Technical Services..... | — | — | — | — | — | — | — |
| Doeane en Aksyns/Customs and Excise..... | 11 497 | — | 515 | — | — | — | — |
| Verdediging (en Vloot)/Defence (and Navy)..... | — | — | 172 | — | 28 909 | — | 10 531 |
| Onderwys, Kuns en Wetenskap/Education, Arts and Science..... | — | — | — | — | — | — | — |
| Finansies/Finance..... | 33 405 | — | 43 051 | — | — | — | — |
| Gesondheid (met inbegrip van lepra-inrigtings en sielsiekehospitale)/Health (including leprosy institutions and mental hospitals)..... | 5 179 | — | 6 663 | — | — | — | — |
| Binnelandse Sake/Interior..... | — | — | 140 | — | 33 469 | — | — |
| Justisie (met inbegrip van Gevangnisse)/Justice (including Prisons)..... | — | — | 55 757 | — | — | — | — |
| Mynwese/Mines..... | — | — | 90 | — | — | — | — |
| Bantoe-administrasie en -ontwikkeling/Bantu Administration and Development..... | — | — | 359 | — | — | — | — |
| Openbare Werke/Public Works..... | 883 | — | 310 | — | — | — | — |
| Suid-Afrikaanse Spoorweë en Hawens/South African Railways and Harbours..... | — | — | — | — | 46 571 | — | 16 669 |
| Ander/Other..... | — | — | — | — | — | — | — |
| TOTALE/TOTALS..... | 50 964 | 107 057 | 107 057 | 877 622 | 134 682 | 247 596 | 27 200 |
| (b) Algemene hospitale (provinsiaal)/General hospitals (provincial)..... | 13 352 | 63 595 | 63 595 | 174 084 | 82 551 | 46 099 | — |
| (c) Plaaslike besture/Local authorities..... | 86 779 | 89 712 | 89 712 | 1 253 773 | 612 927 | 150 531 | — |
| (d) Geneeshere en lede van die publiek/Medical practitioners and members of the public..... | 13 478 | 8 626 | 8 626 | 1 406 323 | 391 467 | 217 447 | — |
| (e) Ander regerings en ander administrasies/Other governments and other administrations..... | — | — | — | — | — | — | — |
| (f) Ander/Other..... | 9 309 | 17 942 | 17 942 | 220 413 | — | 18 691 | — |
| TOTALE/TOTALS..... | 122 918 | 179 875 | 179 875 | 3 054 593 | 1 086 945 | 432 768 | — |
| Fabrikate en uitreikings/Manufactures and issues: | | | | | | | |
| Outogene vaksiene/Autogenous vaccines.....ml | — | — | — | 170 | — | — | — |
| Bakteriese vaksiene/Bacterial vaccines.....ml | — | — | — | — | — | — | — |
| Vaksien teen hondsdolheid/Anti-rabies vaccine.....ml | 121 500 | — | — | — | — | — | — |
| Tuberkulienverduunnings/Tuberculin dilutions.....ml | — | — | — | 5 486 | 3 566 | — | — |
| Serums (verskillende) bakteriese filtrate/Sera (various) bacterial filtrates.....ml | — | — | — | 119 106 | — | — | — |
| Serums (ampulle)/Sera (ampules).....ml | — | — | — | 233 128 | — | — | — |
| Chaulmoograoliepreparate/Chaulmoogra oil preparations.....Liter/Litres | — | — | — | — | — | — | — |
| Limf/Lymph.....Dosisse/Doses | 7 277 794 | — | — | 1 874 527 | 11 400 | 10 434 | — |
| Kuikenvlieslimf (voorhande)/Chick membrane lymph (on hand)..... | — | — | — | — | — | — | — |
| Ander dossie (sluk)/Other (oral) doses.....Bottels/Bottles | — | — | — | 3 821 089 | — | — | — |
| Melkkulture/Milk cultures.....ml | — | — | — | — | — | — | — |
| Human blood processed..... | — | — | — | — | — | — | — |
| Nat bottels vir volbloed voorberei/Wet bottles prepared for whole blood.....Bottels/Bottles | — | — | — | — | — | — | — |
| Serum geskei van bloed/Serum separated from blood.....Liter/Litres | — | — | — | — | — | — | — |
| Ander vaksiene/Other vaccines.....ml | — | — | — | — | — | — | — |
| Griepvaksien/Influenza vaccine.....ml | — | — | — | — | — | — | — |

* Ingelote Bantoe tuislande/Including Bantu Homelands.

† Eenhede/Units.

Tabel 8 (b). — PATOLOGIELABORATORIUM:
AARD VAN ONDERSOEKE UITGEVOER
GEDURENDE DIE JAAR 1969†

Table 8 (b).—PATHOLOGICAL LABORATORIES:
NATURE OF EXAMINATIONS CARRIED
OUT DURING THE YEAR 1969†

| Aard van ondersoek/Nature of examinations* | 1969 |
|--|------------------|
| Bepaalde siekte/Particular disease..... | 1 110 407 |
| Algemeen bakteriologies/General bacteriological..... | 120 064 |
| Serologies/Serological..... | 1 061 051 |
| Parasitologies/Parasitological..... | 468 868 |
| Patologies/Pathological..... | 817 735 |
| Hematologies/Haematological..... | 80 794 |
| Chemies/Chemical..... | 491 915 |
| Diverse/Miscellaneous..... | 6 800 |
| TOTAAL/TOTAL..... | 4 157 634 |

*Eenhede/In terms of units.

†Kaapstad-en Durbankomplekse/Cape Town and Durban complexes.

Tabel 8 (c).—STAATSENTSTOFINSTITUUT, PINE-
LANDS, KAAPPROVINSIE: WERK VERRIG
GEDURENDE DIE JAAR 1969

Table 8 (c).—GOVERNMENT VACCINE INSTI-
TUTE, PINELANDS, CAPE PROVINCE: WORK
CARRIED OUT DURING THE YEAR 1969

| | 1969 |
|--|-------------|
| Aantal skape ingeënt/Number of sheep vaccinated..... | 591 |
| Aantal skape geslaag/Number of sheep successful..... | 577 |
| Aantal skape se limf afgekeur/Number of sheeps' lymph rejected..... | 12 |
| Hoeveelheid limf verkry/Amount of lymph obtained..... | 33 302 gm |
| Gemiddelde hoeveelheid per geslaagde skaap/Average quantity per successful sheep..... | 5 634 gm |
| Gemiddelde aantal dosisse per geslaagde skaap/Average number of doses per successful sheep..... | 11 268 |
| Gemiddelde waarde per geslaagde skaap teen 2c per dosis/Average value per successful sheep at 2c per dose..... | R225,36 |
| Totale aantal dosisse gedurende jaar vervaardig/Total number of doses manufactured during the year..... | 6 660 400 |
| Aantal dosisse gedurende die jaar uitgereik/Number of doses issued during the year..... | 6 654 043 |
| Waarde van alle vaksien vervaardig teen 2c per dosis/Value of all vaccine manufactured at 2c per dose..... | R123 524,58 |
| Waarde van limf gratis uitgereik, bereken teen 2c per dosis/Value of lymph issued free at 2c per dose..... | R94 158,54 |
| Aantal dosisse (ongeveer) voorhande aan einde Desember/Number of doses (approximate) on hand at end of December..... | 29 271 359 |
| Inkomste verkry uit verkope buite die Republiek/Revenue obtained from sales outside the Republic..... | R8 456,92 |

Tabel 8 (d).—STAATSENTSTOFINSTITUUT, PINE-
LANDS, KAAPPROVINSIE: LIMF IN DIE
REPUBLIEK GRATIS UITGEREIK

Table 8 (d).—GOVERNMENT VACCINE INSTI-
TUTE, PINELANDS, CAPE PROVINCE: LYMPH
ISSUED FREE IN THE REPUBLIC

| Jaar Year | Kaapprovinsie Cape Province | Transvaal | Natal | Oranje-Vrystaat Orange Free State | Maandelikse totaal Monthly total |
|--------------|--------------------------------|-----------|-------|--------------------------------------|--|
| 1969..... | 4 707 927 | — | — | — | — |

Tabel 8 (b).—PATOLOGIELABORATORIUM:
AARD VAN ONDERSOEKE UITGEVOER
GEDURENDE DIE JAAR 1970†

Table 8 (b).—PATHOLOGICAL LABORATORIES:
NATURE OF EXAMINATIONS CARRIED OUT
DURING THE YEAR 1970†

| Aard van ondersoek/Nature of examinations* | 1970 |
|--|------------------|
| Bepaalde siekte/Particular disease..... | 1 070 626 |
| Algemeen bakteriologies/General bacteriological..... | 120 170 |
| Serologies/Serological..... | 1 065 175 |
| Parasitologies/Parasitological..... | 1 521 335 |
| Patologies/Pathological..... | 791 365 |
| Hematologies/Haematological..... | 95 870 |
| Chemies/Chemical..... | 430 760 |
| Diverse/Miscellaneous..... | 000 000 |
| TOTAAL/TOTAL..... | 5 095 301 |

*Eenhede/In terms of units.

†Kaapstad- en Durbankompleks/Cape Town and Durban complexes.

Tabel 8 (c).—STAATSENTSTOFINSTITUUT, PINE-
LANDS, KAAPPROVINSIE: WERK VERRIG
GEDURENDE DIE JAAR 1970

Table 8 (c).—GOVERNMENT VACCINE INSTI-
TUTE, PINELANDS, CAPE PROVINCE: WORK
CARRIED OUT DURING THE YEAR 1970

| | 1970 |
|---|-------------------|
| Aantal skape ingeënt/Number of sheep vaccinated..... | 384 |
| Aantal skape geslaag/Number of sheep successful..... | 384 |
| Aantal skape se limf afgekeur/Number of sheeps' lymph rejected..... | 3 |
| Hoeveelheid limf verkry/Amount of lymph obtained..... | 304 30 gm |
| Gemiddelde hoeveelheid per geslaagde skaap/Average quantity per successful sheep..... | 0 80 gm |
| Gemiddelde aantal dosisse per geslaagde skaap/Average number of doses per successful sheep..... | 50 000 |
| Gemiddelde waarde per geslaagde skaap teen 2c per dosis/Average value per successful sheep at 2c per dose | R1 000 |
| Totale aantal dosisse gedurende jaar vervaardig/Total number of doses manufactured during the year..... | 14 000 000 |
| Aantal dosisse gedurende die jaar uitgereik/Number of doses issued during the year..... | 7 277 794 |
| Waarde van alle vaksien vervaardig teen 2c per dosis/Value of all vaccine manufactured at 2c per dose.... | R280 000 |
| Waarde van limf gratis uitgereik, bereken teen 2c per dosis/Value of lymph issued free at 2c per dose.... | R86 564,88 |
| Aantal dosisse (ongeveer) voorhande aan einde Desember/Number of doses (approximate) on hand at end of December..... | 22 000 000 |
| Inkomste verkry uit verkope buite die Republiek/Revenue obtained from sales outside the Republic..... | R10 034,82 |

Tabel 8 (d).—STAATSENTSTOFINSTITUUT, PINE-
LANDS, KAAPPROVINSIE: LIMF IN DIE
REPUBLIEK GRATIS UITGEREIK

Table 8 (d).—GOVERNMENT VACCINE INSTI-
TUTE, PINELANDS, CAPE PROVINCE: LYMPH
ISSUED FREE IN THE REPUBLIC

| Jaar Year | Kaapprovinsie Cape Province | Transvaal | Natal | Oranje-Vrystaat Orange Free State | Maandelikse totaal Monthly total |
|--------------|--------------------------------|-----------|-------|--------------------------------------|--|
| 1970..... | 4 328 244 | — | — | — | — |

Tabel 9 (a).—REGULASIES OP TERAPEUTIESE STOWWE: LISENSIES KRAGTENS DIE REGULASIES OP TERAPEUTIESE STOWWE UITGEREIK GEDURENDE DIE JAAR GEËINDIG 31 DESEMBER 1969

Table 9 (a).—THERAPEUTIC SUBSTANCES REGULATIONS: LICENCES ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDED 31 DECEMBER 1969

| Besonderhede Particulars | Invoerlisensies Import licences | Vervaardigings- lisensies Manufacturing licences | Vitamiënpermitte Vitamin permits | Navorsings- lisensies Research licences |
|--|------------------------------------|---|-------------------------------------|---|
| Aantal lisensies van krag/Number of licences in force 1/1/69 | 143 | 77 | — | 15 |
| Uitgereik/Issued..... | 17 | 7 | — | — |
| Ingetrek/Cancelled..... | 10 | 3 | — | — |
| Van krag/In force 31/12/69..... | 170 | 87 | — | 15 |

Tabel 9 (a) (vervolg).—BESONDERHEDE VAN VERVAARDIGINGSLIENSIES VAN Krag OP 31 DESEMBER 1969

Table 9 (a) (continued).—DETAILS OF MANUFACTURING LICENCES IN FORCE ON 31 DECEMBER 1969

| | |
|---|----|
| Antitoksiene en serums/Antitoxins and sera..... | 14 |
| Toksiene, antigene en vaksiene/Toxins, antigens and vaccines..... | 1 |
| Vitamiene/Vitamins..... | 42 |
| Antibiotiese middels/Antibiotics..... | 16 |
| Intravaskulêre preparate/Intravascular preparations..... | 2 |
| Ensieme/Enzymes..... | 3 |
| Insulien/Insulin..... | 2 |
| Kortikotrofiënpreparate/Preparations of Corticotrophins..... | 1 |
| Hepariënpreparate/Preparations of Heparin..... | 1 |
| TOTAAL/TOTAL..... | 82 |

Tabel 9 (b).—ONDERSOEKE KRAGTENS DIE REGULASIES OP TERAPEUTIESE STOWWE UITGEVOER GEDURENDE DIE JAAR GEËINDIG 31 DESEMBER 1969

Table 9 (b).—EXAMINATIONS CARRIED OUT UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDED 31 DECEMBER 1969

| Produk/Product | In die Republiek vervaardig Manufactured in the Republic | Ingevoer Imported | Aantal onbevredigend Number unsatisfactory |
|---|---|----------------------|---|
| Bakteriese vaksiene/Bacterial vaccines..... | — | 3 | — |
| Intramuskulêre preparate/Intramuscular preparations..... | 10 | 4 | — |
| Mensbloed en bloedpreparate/Human blood and blood preparations..... | — | — | — |
| Arsfenamiene en derivate/Arsphenamines and derivatives..... | — | — | — |
| Dermsnaar/Catgut..... | — | — | — |
| Chirurgiese materiaal/Surgical material..... | — | 5 | — |
| Vitamiene en preparate/Vitamins and preparations..... | — | — | — |
| Antibiotiese middels/Antibiotics..... | 329 | 97 | 7 |
| Ontsmettingsmiddels/Disinfectants..... | — | — | — |
| Ander/Other..... | 8 | — | — |
| Estrogene en androgene/Oestrogens and Androgens..... | — | — | — |
| TOTALE/TOTALS..... | 347 | 109 | 7 |

Tabel 9 (a).—REGULASIES OP TERAPEUTIESE STOWWE: LISENSIES KRAGTENS DIE REGULASIES OP TERAPEUTIESE STOWWE UITGEREIK GEDURENDE DIE JAAR GEËINDIG 31 DESEMBER 1970

Table 9 (a).—THERAPEUTIC SUBSTANCES REGULATIONS: LICENCES ISSUED UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDED 31 DECEMBER 1970

| Besonderhede Particulars | Invoerlisensies Import licenses | Vervaardigings- lisensies Manufacturing licences | Vitamiënpermitte Vitamin permits | Navorsings- lisensies Research licences |
|--|------------------------------------|---|-------------------------------------|---|
| Aantal lisensies van krag/Number of licences in force 1/1/70 | 150 | 81 | — | 15 |
| Uitgereik/Issued..... | 11 | 1 | — | 1 |
| Ingetrek/Cancelled..... | 8 | 3 | — | — |
| Van krag/In force 31/12/70..... | 169 | 85 | — | 16 |

Tabel 9 (a) (vervolg).—BESONDERHEDE VAN VERVAARDIGINGSLIENSIES VAN KRAAG OP 31 DESEMBER 1970

Table 9 (a) (continued).—DETAILS OF MANUFACTURING LICENCES IN FORCE ON 31 DECEMBER 1970

| | |
|---|----|
| Antitoksiene en serums/Antitoxins and sera..... | 14 |
| Toksiene, antigene en vaksiene/Toxins, antigens and vaccines..... | 1 |
| Vitamiene/Vitamins..... | 39 |
| Antibiotiese middels/Antibiotics..... | 16 |
| Intravaskulêre preparate/Intravascular preparations..... | 2 |
| Ensieme/Enzymes..... | 3 |
| Insulien/Insulin..... | 2 |
| Kortikotrofiënpreparate/Preparations of Corticotrophins..... | 1 |
| Hepariënpreparate/Preparations of Heparin..... | 2 |
| TOTAAL/TOTAL..... | 80 |

Tabel 9 (b).—ONDERSOEKE KRAGTENS DIE REGULASIES OP TERAPEUTIESE STOWWE UITGEVOER GEDURENDE DIE JAAR GEËINDIG 31 DESEMBER 1970

Table 9 (b).—EXAMINATIONS CARRIED OUT UNDER THE THERAPEUTIC SUBSTANCES REGULATIONS DURING THE YEAR ENDED 31 DECEMBER 1970

| Produk Product | In die Republiek vervaardig Manufactured in the Republic | Ingevoer Imported | Aantal onbevredigend Number unsatisfactory |
|---|---|----------------------|---|
| Bakteriese vaksiene/Bacterial vaccines..... | — | — | — |
| Intramuskulêre preparate/Intramuscular preparations..... | — | — | — |
| Mensbloed en bloedpreparate/Human blood and blood preparations..... | — | — | — |
| Arsfenamiene en derivate/Arsphenamine and derivatives..... | — | — | — |
| Dermsnaar/Catgut..... | — | — | — |
| Chirurgiese materiaal/Surgical material..... | 1 | — | — |
| Vitamiene en preparate/Vitamins and preparations..... | — | — | — |
| Antibiotiese middels/Antibiotics..... | 235 | 46 | 12 |
| Ontsmettingsmiddels/Disinfectants..... | — | — | — |
| Ander/Other..... | 9 | 1 | 2 |
| Estrogene en androgene/Oestrogens and Androgens..... | — | — | — |
| TOTAAL/TOTALS..... | 245 | 47 | 14 |

Tabel 9 (c).—NARKOTIESE MIDDELS INGEVOER
IN DIE REPUBLIEK VAN SUID-AFRIKA, 1969Table 9 (c).—NARCOTIC DRUGS IMPORTED
INTO THE REPUBLIC OF SOUTH AFRICA, 1969

| Middel/Drug | 1969 | |
|---|----------|------|
| | Kilogram | Gram |
| 1. Kannabis/Cannabis | — | — |
| 2. Kannabishars/Cannabis resin | — | — |
| 3. Kokablaar/Coca leaf | — | — |
| 4. Kokaïen/Cocaine | 17 | 628 |
| 5. Kodeïen/Codeine | — | — |
| 6. Konsentraat van papawerhalm/Concentrate of poppy straw | 3 000 | — |
| 7. Dekstromoramied/Dextromoramide | — | 762 |
| 8. Dihidrokodeïen/Dihydrocodeine | 9 | 366 |
| 9. Difenoksilaat/Diphenoxylate | 7 | 440 |
| 10. Etielmorfien/Ethylmorphine | — | — |
| 11. Heroïen/Heroin | — | — |
| 12. Hidrokodoon/Hydrocodone | — | 616 |
| 13. Hidromorfoon/Hydromorphone | — | 007 |
| 14. Levorfanol/Levorphanol | — | — |
| 15. Metadoon/Methadone | 1 | 440 |
| 16. Morfien/Morphine | 6 | 930 |
| 17. Normetadoon/Normethadone | — | 075 |
| 18. Opium | 665 | 119 |
| 19. Oksikodoon/Oxycodone | 1 | 404 |
| 20. Petidien/Pethidine | 141 | 997 |
| 21. Folkodien/Pholcodine | 11 | 100 |
| 22. Tebakon/Thebacon | — | — |
| 23. Dipipanoon/Dipipanone | 13 | 050 |
| 24. Fentaniel/Fentanyl | — | 041 |
| 25. Diëtieliambuteen/Diethylthiambutene | — | 542 |
| 26. Fenasosien/Phenazocine | — | — |
| 27. Oksimorfoon/Oxymorphone | — | 006 |
| 28. Fenoperidien/Phenoperidine | — | — |
| 29. Etorfien/Etorpihne | — | 009 |

Tabel 9 (c).—NARKOTIESE MIDDELS INGEVOER
IN DIE REPUBLIEK VAN SUID-AFRIKA, 1970Table 9 (c).—NARCOTIC DRUGS IMPORTED
INTO THE REPUBLIC OF SOUTH AFRICA, 1970

| Middel/Drug | 1970 | |
|--|----------|------|
| | Kilogram | Gram |
| 1. Kannabis/Cannabis..... | — | — |
| 2. Kannabishars/Cannabis resin..... | — | — |
| 3. Kokablaar/Coca leaf..... | — | — |
| 4. Kokaïen/Cocaine..... | 5 | 971 |
| 5. Kodeïen/Codeine..... | — | — |
| 6. Konsentraat van papawerhalm/Concentrate of poppy straw..... | 7 000 | — |
| 7. Dekstromoramied/Dextromoramide..... | — | 486 |
| 8. Dihidrokodeïen/Dihydrocodeine..... | 4 | 429 |
| 9. Difenoksilaat/Diphenoxylate..... | 11 | 160 |
| 10. Etielmorfien/Ethylmorphine..... | — | — |
| 11. Heroïen/Heroin..... | — | — |
| 12. Hidrokodoon/Hydrocodone..... | — | — |
| 13. Hidromorfoon/Hydromorphone..... | — | — |
| 14. Levorfanol/Levorphanol..... | — | — |
| 15. Metadoon/Methadone..... | — | 540 |
| 16. Morfien/Morphine..... | 1 | 388 |
| 17. Normetadoon/Normethadone..... | — | — |
| 18. Opium..... | 897 | 576 |
| 19. Oksikodoon/Oxycodone..... | — | — |
| 20. Petidien/Pethidine..... | 76 | 560 |
| 21. Folkodien/Pholcodine..... | 6 | 750 |
| 22. Tebakon/Thebacon..... | — | — |
| 23. Dipipanoon/Dipipanone..... | 13 | 050 |
| 24. Fentaniel/Fentanyl..... | — | 006 |
| 25. Diëtieliambuteen/Diethylthiambutene..... | 1 | 083 |
| 26. Fenasosien/Phenazocine..... | — | — |
| 27. Oksimorfoon/Oxymorphone..... | — | — |
| 28. Fenoperidien/Phenoperidine..... | — | — |
| 29. Etorfien/Etorpihne..... | — | 002 |

